packaging



Nominated for Packagings Hall of Fame. Story on Page 88

Why are large quantity

GLUE USERS

turning to Aqua-Flakes?

. make glue at your desk and see!

AQUA-FLAKES start as a complete liquia adhesive. Ready-for-use.

We remove the water by a special process. When you replace it, all of the original adhesive qualities return.

- better than liquid adhesives!

AQUA-FLAKES, a dehydrated liquid dextrin adhesive, save up to 60%. There's no water to pay for. No freezing problems in use or in storage.

- better than old-fashioned cold water solubles!

AQUA-FLAKES take the guesswork out of preparation. Eliminate "lumpy" mixtures . . . complicated, time-wasting formulas.

- better than "cook-ups"!

AQUA-FLAKES are prepared in minutes not hours. No heating or cooling necessary. No costly equipment. Just add to water for a



Proof? Make a batch at your desk! We'll supply an AQUA-FLAKES sample . . . a stirring rod . . . and a handy measuring glass — if you'll mail the coupon!

Viscomat equipment is designed to prepare AQUA-FLAKES solutions - automatically - in any quantity, to any viscosity. For fabricating, sealing, and adhering paper containers and other paper products.

If you are a large user of industrial adhesives, you should be interested in AQUA-FLAKES.



270 Madison Ave., NEW YORK 16; 3641 So. Washtenaw Ave., CHICAGO 32; 735 Battery St., SAN FRANCISCO 11; and other principal cities. In CANADA: National Adhesives (Canada) Ltd., TORONTO and MONTREAL.

Address

City

l'D I	LIKE TO SEE whether AQUA-FLAKES are easier to prepare, more economical than my present adhesives.
□ PI	ease send an AQUA-FLAKES test kit
-	lease have a National representative call on
Mr. Compe	ony

GAIR PLASTAFOL

COMBINATION CARTONS Carry Briggs new KLEAN SPOT KITS to market

BRIGGS MANUFACTURING COMPANY

DETROIT, MICH.

June 11, 1952

Robert Gair Company, Inc Plastafol Division 155 East 44th Street New York 17. New York

You may be interested to know the Klean Spot Kit has been received with great enthusiasm by the trade.

In addition to the utility of the Klean Spot Kit, the in addition to the utility of the klean Spot Kit, the package, as specifically designed for us by your company, has played an important part in the enthusiastic reception of our new product.

A wide distribution plan is under way. The Klean Spot Kit will be advertised in newspapers and magazines, in-Kit will be advertised in newspapers and magazines, in-cluding the Good Housekeeping Magazine, within the next few months. We will send you a proof of the ad as, I am sure. you would like to have it because of the unique design of the package.

Thank you for your fine cooperation.

Very truly yours.

BRIGGS MANUFACTURING COMPANY W. J. Cuhamor

W. J. VAthanson

Parts & Refinishing Materials Division

THE TRANSPARENCY DOESN'T BREAK!

This Gair Plastafol combination carton contains three packaging materials made by Gair-

- FOILINE—sparkling foil lined board
- TUFBORD—for extra strength
- PLASTAFOL—durable rigid transparent plastic

Only GAIR makes all three!

For visibility, protection and sales appeal try the Plastafol combination carton. You are cordially invited to inquire how Plastafol Combination Packages can be adapted to your products.

ROBERT GAIR COMPANY, INC., 155 EAST 44TH STREET, NEW YORK . TORONTO

PAPERBOARD

FOLDING CARTONS

SHIPPING CONTAINERS

General

- Help-yourself textiles 77
 A whole new technique of soft-goods packaging is being created by new merchandising concepts and new supermarket outlets.
- 'B'-line for Burroughs

 Package design is the implement for an orderly reformation of business-machines supply lines under a quality standard.
- Del Monte 88

 The world's biggest line of canned fruits and vegetables is nominated to *Packaging's Hall of Fame* as representing the best in packaging in its field.
- Design Histories 96
 Protective tomato pre-pack . . . B.V.D.'s new packages . . . new automatic cap for collapsible tubes . . . centennial candy box.
- Really scuffproof labels

 Production and marketing problem is solved for Realemon products with a hard, non-blocking, baked plastic coating.
- Standards for oil

 Petroleum industry acts to eliminate minute differences in can dimensions.
- Packaging Pageant
 Perfume-jewelry tie-in package . . . new type
 of bacon package . . . re-use cap for aerosol
 container . . . other new ideas.
- Armored shipper
 Pulp strengthened with glass fibres and phenolic resins is molded to cradle delicate magnet wire in cushioned, conforming halves.
- Little squirt

 Miniature squeeze tube that does away with eye droppers offers convenient new method for all types of single-drop applications.
- Display Gallery

 Butter carton doubles as a display . . . Pal's new pilferproof razor-blade unit . . . the month's other merchandising display ideas.
- The growing line
 Odell's Trol operation illustrates the important stage of transition from semi-automatic to wide-range automatic packaging.

Western States Section

- West Coast: 1952
 Food is still No. 1 in Western packaging and it fights a battle against costs.
- 4th Western Show

 Los Angeles is the setting for a bigger and broader exposition and conference.
- Plastics success story
 Practicability of Diamond Walnut's molded
 polystyrene jar with vacuum cap has been
 proved by a year of use.
- Pre-packaging for quality

 Safeway's big Northwest plant at Portland takes the tolerance out of produce grading.
- Salmon strike
 Whitney & Co. solve some problems peculiar to the fish by adapting one label to all types.
- Family of salts

 Leslie gains strength and unity by adapting consumer design to 40 other kinds of salt.

Technical

- Organoleptic evaluation

 Sensory panel testing can help protect food products from changes of aroma and flavor imparted by packaging materials. By L. C. CARTWRIGHT and P. H. KELLEY.
- Questions and Answers 148

Departments

Equipment and materials 150
Plants and people 162
For your information 176
U.S. patents digest 184



27 COMPANIES 80 PRODUCTS 113 PACKAGES

...all handled by
JONES "CMV"
(constant motion
vertical)
CARTONERS

In this partial group of CMV users the smallest carton is $\frac{7}{8} \times \frac{7}{8} \times \frac{21}{4}$ inches.

The largest carton is $\frac{3}{8} \times \frac{37}{8} \times \frac{81}{2}$ inches.

CMV Cartoner models span size ranges from ½ x ¾ x 2¼ to 4 x 4 x 9 inches.

CMV"
takes 'em all

EVERY JONES "CMV" CARTONER can be calibrated to many sizes and shapes of cartons. It takes the flat cartons from magazine, opens the carton, tucks bottom flaps, conveys the open carton past manual loading stations, then tucks top flaps (optional type for glue-end cartons) and delivers the loaded carton.

Change-over to different sizes is handled in mere minutes — without special tools or skills.

JONES cartoning engineers are away available to help work out the FASTEST, most ECONOMICAL, most DEPENDABLE cartoning production line for YOU.

Ask us what it takes to cut your multiple-size cartoning costs -no obligation. Write, wire or 'phone.

P. O. BOX 2055, CINCINNATI, ONIO

R. A.

& COMPANY, INC.

Modern packaging

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EXECUTIVE AND EDITORIAL OFFICES: 875 Madison Ave., New York 22; Telephone --Plaza 9-2710.

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EDITORIAL

Let the buyer beware

Our American economy has outdone itself again. In the midst of a shooting war, we are once more in a buyers' market.

The National Assn. of Purchasing Agents, in its latest report on containers markets, declares that "For the first time in years, raw materials are readily available for all types of packaging. No known shortage exists. Large capacity is available and buyers may select their containers by type, striving for the best in consumer acceptance . . ."

The Department of Commerce, in the Summer issue of its quarterly Containers and Packaging Industry Report, finds the first-quarter situation virtually the complete reverse of what it was a year ago. "The shortage of materials . . . has, with the exception of selected metals, disappeared and resulted in all types of containers and packaging materials being adequate and with most types in generous supply. Users are now selective in purchases . . ."

NPA has in recent weeks revoked or eased control orders on closures, tubes, glass, strapping, foil and drums. Business men are quitting NPA posts and going back to their businesses; the flood of orders and press releases has dwindled to a trickle.

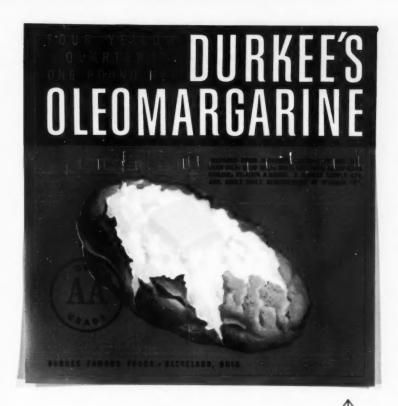
All this sounds good. But there is an under-note of warning—a hint that the pendulum may swing too far—when the Department of Commerce finds that suddenly the inventory position of packaging users has "changed from a maximum to bare working minimum" and the purchasing agents comment that "packers have been decreasing container stocks, with the hope of reduced costs."

The appearance of a buyers' market is dangerously false if it has been created by a buyers' strike.

The futility of hoping for lower prices should be apparent in the current inexorable pattern of high volume with steadily higher wages, higher taxes and lower profits. In such a situation the law of supply and demand must be regarded as suspended. There is no way that prices can move except up. It's no time to be caught with inventories down.



The Editors



Modern Merchandising
Requires Modern Packaging



Margarine is big news today. And one brand—Durkee's "Gold Standard"—is grabbing the headlines. It's the food retailer's dream, high in quality and packaged in bright, beautifully printed cellophane by Dobeckmun. Durkee's are smart merchandisers. Their packages are designed for today's modern retail setting. So must yours. You can have a new selling design by calling your Dobeckmun man today. The Dobeckmun Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont

JULY 1952

Some of Cromwell's Paper and Services **CROMWELL'S** "Paper Engineering"

gives you the right paper for your job To properly protect your product against marring, scratching,

moisture or vapor, consult with Cramwell's paper engineers. Their experience, gained in many fields, will be applied to help determine the best paper—the best packaging for your product no matter what your problem may be.

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If you do your own printing, write for Cromwell's FREE Handbook on Makeready.

CROMWELL PAPER COMPANY, 4801 South Whipple Street . Chicaga 32, Illinais

· Government packaging · Specialty bags . Multi-wall sacks . Industrial



News about

B. F. Goodrich Chemical Company raw materials

Cardboard motor oil container that petroleum products can't harm!





Fiber drum—surface protected inside or out!





The tape that "sees" at night!

for these 3 packaging success stories!

THESE pictures show you just a few of the wide range of packaging applications for Geon materials. One is a luminescent tape that glows at night, renews itself during the day. Another—a cardboard container developed by a French manufacturer for motor oil and other petroleum products; it's grease and-water-proof... replaces critical tin-plate. The third, a fiber drum that can be coated inside or outside to provide a washable, abrasion-resistant surface, and good moisture vapor transmission protection.

Check the many advantages that Geon materials offer for packaging applications—resistance to heat, cold, weather, water and wear—gas, oil and many chemicals. Geon materials also provide excellent moisture vapor resistance, good anchorage, decorative appeal, and allow heat sealability.

Geon materials—resins or latices—may help you improve your packaging materials or methods, or develop new ones. Write for technical advice. Ask for your free copy of the

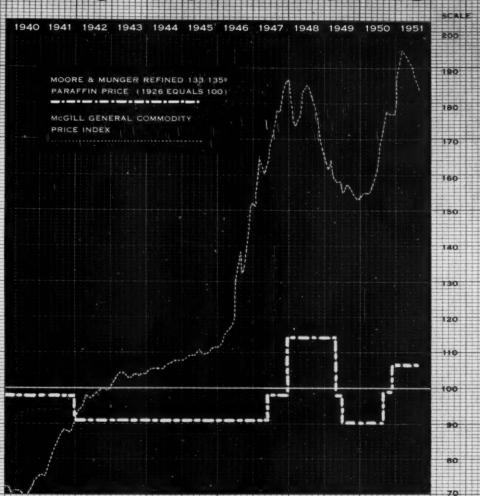
helpful booklet, "Packaging Problems Solved With Geon". Please address Dept. GL-7, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco.



GEON RESINS • GOOD-RITE PLASTICIZERS... the ideal team to make products easier, better and more saleable.

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers • HARMON organic colors

a facil worth noting



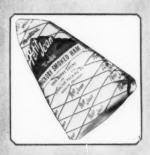
SINCE 1940 GENERAL COMMODITY PRICES HAVE RISEN 156%. MOORE & MUNGER'S REFINED PAR-AFFIN ONLY 9%. THE RELATIVE COST OF PARAFFIN IN WAXED PAPER HAS ACTUALLY DECLINED WHILE. AT THE SAME TIME, QUALITY HAS IMPROVED.

IT'S WORTH NOTING THAT IN WAX YOU'RE STILL GETTING VERY CLOSE TO YOUR 1940 DOLLAR'S WORTH, TODAY.



MOORE & MUNCER

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packaging operations . . . to save labor, cut costs and improve production. Our Sales Representatives are in all principal cities, ready to help. Call or write today.

Packaging, originated and produced by CENTRAL STATES is Saving Labor in scores of industries

LABOR SAVING HAM BAG

FORMERLY: Handling 3 separate sheets in three separate wrapping operations and tying with twine.

NOW: Central States Ham Bag has 3 sheets sewed together in bag form. Ham is quickly slipped in, bag sealed with tape. No loose ends, no twine to slip, better display face. Labor saving 35%-45%.

LABOR SAVING GIBLET BAGS

FORMERLY: Handling individual sheets of paper to wrap giblets. Slow operation, uncertain protection, unattractive package.

NOW: Wet strength Giblet Bags protect giblets, won't fall apart, have neat appearance. Used with automatic bagging machine, labor saving is 50%.

LABOR SAVING NEWSPAPER BAGS

FORMERLY: Newspapers wrapped in sheets of paper, giving inadequate protection against the weather.

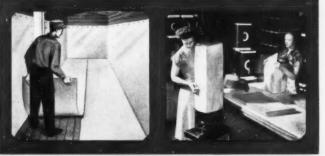
NOW: Waterproof Delivery Bags give complete protection to papers. Attractive printing adds advertising value. Easily handled, papers slide in quickly. Labor saving 60%.

LABOR SAVING MEASURED CARLINERS

FORMERLY: Large rolls of paper carried into freight car, unrolled, measured out, cut off and tacked up. NOW: Pre-cut Carliner Sets exactly fit walls and floors. No waste, no measuring or cutting. Labor saving 80%—85%.

LABOR SAVING LUGGAGE BAGS

FORMERLY: Plain kraft paper used for wrapping. Slow operation required large packing department. NOW: Bags made to fit standard luggage sizes quickly slip over bags, are easily sealed with strip of tape. Smaller force handles same output with less waste. Labor saving 60%.



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chandising puts such a premium on outstanding presentation, Oxford Quality Papers have long been the choice of department and chain stores for their finest

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Oxford Quality Papers in a wide variety of coated and uncoated grades can help immeasurably to enhance the appeal and salability of your products. Call on your nearest Oxford Merchant for expert help in planning your next printed promotion.

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U. S. LINE reels in Sales with TRI-STATE Rigid Plastic Boxes

U. S. Line Company, Westfield, Massachusetts, one of the first fishing line manufacturers to use Tri-State Rigid Plastic Boxes, reports: "Since packing our fly lines individually in Tri-State rigid plastic boxes, our sales on these items have increased at

least 50%. These lines - which are finished in oil, baked, and honed-preserve their original finish and flexibility to a remarkable degree even when carried in stock by the dealer from one season to the next. The container is well worth the cost."

Gleaming, transparent Tri-State Boxes which permit merchandise to be clearly seen and, at the same time, protect it from dirt, moisture and humidity, lure not only fishermen but customers for many kinds of products.

And the reusability of these boxes adds to the purchasers' satisfaction. After the original contents have served their purpose, the fisherman finds he has an excellent depository for spinners, flies and other tackle; the housewife, an ideal container for service in the refrigerator and throughout the home. This is the bonus feature that assures repeat sales.



Our stock box No. 52 (4 1/8" diam. x 1/8" deep) affords an outstanding packaging and merchandising medium for U. S. Line Company. Enhance the appeal of your products, preserve their quality, and increase sales by packaging in Tri-State rigid plastic boxes! You may select from our wide range of stock sizes and shapes, or we'll mold to your specifications.



The best Rigid Plastic Boxes are Injection Molded by

IRI-STATE PLASTIC MOLDING COMPANY, Inc. **HENDERSON 6, KENTUCKY**

NEW YORK: 12 E. 41st St., MUrray Hill 3-6572 CHICAGO: 176 W. Adams St., Franklin 2-7292





The Mayfair Packing Company's new Saratoga Prunes package gleams with gold-finished Reynolds Aluminum Foil. And it proved to be golden in results. Sales started to climb from the day the package appeared on store shelves... soon doubled!

And sales stay right up there. Because this foil package has more than the brilliant eye-appeal that attracts first-time buyers. It provides superior protection against both moisture and damaging light rays. It keeps dried fruits luscious and tender as nothing else can. So people keep coming back for them. Repeat sales!

Only aluminum foil combines the greatest protection with the greatest eye-appeal. No other material has solved so many packaging problems so successfully and economically. The list is long and ever-growing: cookies, cereals, dehydrated foods, candy, chewing gum, butter, cheese, margarine, cleansers.

Find out what Reynolds Aluminum Foil can do for your product. Consult your nearest Reynolds Sales Office or write to

Reynolds Metals Company, General Sales Office, Louisville 1, Kentucky.







SARATOGA

Healthful and Delicious





This is the "Standard" for Skylines

This world-famous grouping of tall downtown buildings is a familiar sight to all visitors landing by boat in New York City.

This is the "Standard" for Package Printing

This catchy box wrap, with a window coinciding with the window on the box, projects a feeling that leads to sales. Standard prints it in yellow, white, brown and green. The effect? Terrific!



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PRINTERS OF CELLOPHANE, ACETATE and GLASSINE SINCE 1936
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More Protection in packaging your product for delivery to the nation's far-flung fighting forces!

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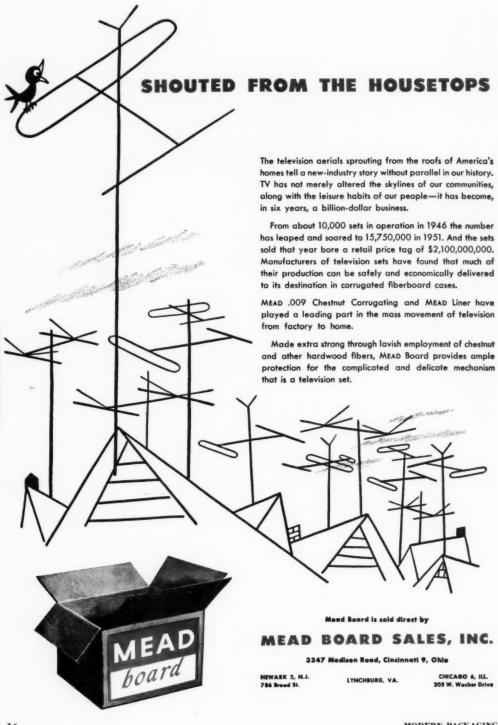


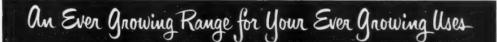
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that meets your
Army, Navy and
Air Force Specifications.

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More and more firms are discovering that MILLS-PLASTIC unbreakable bottles serve their needs far better than any other bottles. MILLSPLASTIC leakproof containers now meet daily use in packages for cosmetics, acids, photosensitive chemicals, hygroscopic materials. Our growing line of standard bottles and expanding scope of custom work is the direct answer to these widening needs—yours among them.

STANDARD SOTTLES — Our history-making gallon sized bottle and precision engineered clusure are the largest in our standard line which also includes Mills "Cylinder" in 2-16-8 ounces, Mills "Oblong" in 2-1 ounces. Both styles are available in natural Polyethylene or your preferred color. Standard atomizers, closures and tubing are also available.

CUSTOM BOTTLES—We are currently meeting specialized needs by creating custom shaped bottles in an unprecedented variety of styles, sizes, colors. We also make special atomizers and closures.

Let us show you today how and why MILLSPLASTIC hottles can hest fell your needs

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Sales Agent: W. Braun & Company Chicago: 300 N. Canal New York: 715 Fifth Avenue Detroit 139 W. Magle, Birmingham, Michigan



Mfd. under patents 2,515,093-2,579,390-2,579,399. Other pats. pend.

GALLON SIZE

"CYLINDER

duck soupl

0

DUO-TITE

the perfect "No-Sift" bag. Ideal for insecticides, fertilizers, chemicals, any products which must be packaged in siftproof containers. Its sturdy construction combines special liners with folding, gluing and heat-sealing.



THERMOSEAL

the bag with 20% more protection. It's a fact. There is 20% more protection in Betner's THERMOSEAL than in other closures. Eliminates staples. Insures water-vapor protection, sift-proofness, and retention of flavor.



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the bag with extreme maistureimpregnability. Locks maisture out. Protects freshness, flavor, goodness of food by a patented film of rubberized compound held filmly in suspension between two layers of glassine.



FLAV-O-TAINER.

the bag with vacuum-packed freshness. PRofilm* lined, all inner seams are hermetically sealed. Replacing air with insert gas, and sealing top, FLAV-O-TAINER becomes an airtight unit. Used whenever freshness is a must.

**Mfd. by Goodyeo T. & R. Co.



Betner's service's complete, Betner has the facilities, thepackaging know-how and cost-consciou experience to recommend ideas . . . product finished bags . . . advise you of the prope machinery to insert liner bags in cartons YES, SIREE! The most difficult packaging problems are "duck soup" to Betner experts, who delight in mastering complicated challenges. Betner engineers have designed bags with outstanding features . . . special folding, gluing and heat-sealing . . . bags constructed for specific, demanding purposes. The availability of multicolor preprinting and finish on Betner bags makes them valuable, sales-stimulating aids. Write today for full particulars.

Whatever the packaging need, there's a Betner bag...FILL IT!

BENJ C BETNER/CO (La.

PLANTS ALSO LOCATED IN:

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will cut the hard way?



when you <u>can</u> cut... fast and cheaply!

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CHARLES BECK THE CORPORATION
406 N. 13th Street

ALL DRESSED UP.

No matter whether it is candy, cookies, or cosmetics, a drug product, a food product — or even zippers . . . when you dress up **your** package with Lord Baltimore's exclusive FIDEL-I-TONE process of fine-screen printing, you may be sure it will go places!

Developed through years of actual experience, FIDEL-I-TONE reproduces from artwork or color photographs, illustrations with more than twice as many halftone dots per square inch...on coated or uncoated boxboard and ordinary label paper.

With

FIDEL-I-TONE

HIGH FIDELITY COLOR REPRODUCTION

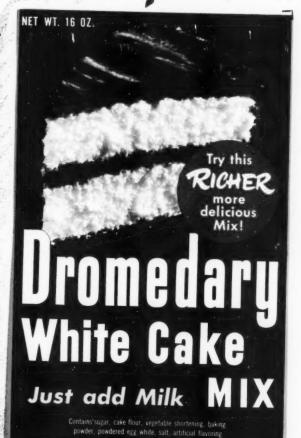
With its almost unbelievable realism, its clear sharp type, and its smooth unmottled solid colors, FIDEL-I-TONE creates packages—such as the one on the opposite page—that are alive with eye-appeal. (And almost unbelievable, too, the cost of FIDEL-I-TONE is no more than for regular printing.)

In the big new Lord Baltimore plant your FIDEL-I-TONE package is controlled from the arrival of the art work until final shipment. Every step in the production of our fine packaging materials is checked constantly by our quality control system — paper and board standards, the blending and matching of our own inks, color uniformity, and cutting, creasing and gluing. More than 75 years of experience are back of each step.

To appreciate fully the matchless eye-appeal and tremendous sales impact of FIDEL-I-TONE, you should examine the complete package at close range. We will be glad to send you a full one-pound box of this Dromedary White Cake Mix—(incidentally it makes a very fine cake.) Write or call the Lord Baltimore office nearest you, today.

and Joing Places!











of the highest award in the 1952 National Carton Competition, as the package with the BEST FULL-COLOR REPRODUCTION. Produced for The Hills Brothers Company by FIDEL-I-TONE, in 4 colors, with overprint varnish.

2-LAYER

FOLDING BOXES INSERTS

LABELS



The Lord Baltimore Press

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BIG

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SOMETHING TO

SING ABOUT

COLORS THAT SELL

... Heekin guarantees you true constant color reproductions—long life colors—chosen to enhance the individual character of your product.

COLORS THAT SING

... Eye-catching colors — a specialty with Heekin artists — give a hearty sales punch to your product.

CANS WITH CHARACTER

. . designed by Heekin artists and package designers with a flair for individual creations in metal packaging.

CANS THAT COMPETE

... adding value to a quality product —attracting new customers, upping repeat sales among old customers.













HEEKIN Jenson Lithographed CONG

THE HEEKIN CAN CO. THE THE HEEKIN CAN CO.









Springs Mills never sold packaged diapers before. The box had to be right. So they called in that trusted ally of many leading American industries-Old Dominion Box Company. Walk over to the baby department of your favorite store, and you'll see the result. A family of packages with typical SPRINGMAID stand-out qualities.

> Old Dominion is the Southern box maker with a national reputation. From its plants located throughout the South come precision built paper boxes and packaging material that excel. Write to us on your next requirement. It'll be a pleasure to serve you, suh.

ox Company Inc. PLANTS LOCATED THROUGHOUT THE SOUTH

Executive Offices: LYNCHBURG, VA. . Sales Offices: CHARLOTTE, N. C.

WITH A NATIONAL REPUTATION

JULY 1952

KEEP POWDERED PRODUCTS FROM SIFTING



... with tailor-made Riegel papers

A few things RIEGEL

- can do for you . . . Keep products dry
- Keep products moist
- Retard rancidity
- Seal with heat or glue
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- Stop grease penetration
- Retain aromas, flavors
- Resist extreme cold Reduce breakage
- Prevent sifting
- Protect from light
- Resist alkalis
- Resist corrosion
- **Boost machine efficiency**

MANY UNUSUAL PROBLEMS are created by powdered or granulated products that may sift through the seams of a package . . . problems Riegel has solved for many items such as dessert powder, prepared flour, sugar, drugs and chemicals. What is right for one product is seldom right for another. In one case the answer may be a standard waxed glassine . . . in another it may be a special triplex lamination. Whatever the answer, Riegel can usually tailor-make the right paper . . . quickly, efficiently, economically. Just tell us what you want paper to do for you. Write to Riegel Paper Corporation, P.O. Box 170,

Riegel FUNCTIONAL PAPERS FOR PROTECTIVE PACKAGING

Grand Central Station, New York 17, N. Y.

WRITE FOR SAMPLE BOOK



stops the eye . . . starts the sale pack to attract in maryland blue



Sales Appeal is Crystal-Clear in These Sparkling Packages

with transparent Du Pont Acetate Film



TO CATCH THE SHOPPER'S EYE, this sock kit is laminated with Du Pont Acetate Film. The same sparkling film covers a die-cut window to show the bright-colored yarns to best selling advantage. Knitters can work right out of the box. Package looks good to the last thread because Du Pont Acetate Film protects the carton surface, won't shrink.



colorful and moistureproof packaging is achieved with Du Pont Acetate Film laminated to foil. The film provides stability and a smooth printing surface for product identification. Many products, including effervescent tablets, powdered drugs, soluble coffee and dried milk, can rely on this combination for protection and eyeappealing sparkle.



BEAUTY THAT LASTS from plant to kitchen is assured when the label is laminated with sparkling clear Du Pont Acetate Film. Even rough handling and temperature extremes won't lessen its neat appearance. And the film highlights the printed surface . . . adds a quality look that can help build sales for any canned or bottled product.

Du Pont manufactures Acetate, Cellophane and Polythene Films. For packaging assistance, see your Du Pont representative. For information on bags and printed materials get in touch with a converter of Du Pont packaging films.





ISOM Anniversory

BETTER THINGS FOR BETTER LIVING



LUSTROUS GIFT APPEAL was gained for this baby-product carton by laminating it with Du Pont Acetate Film. The carton is kept clean-looking on the store shelf and in the home . . . shows the shopper that the contents are kept sanitary . . . clean enough for baby.

You can give your package the extra sales appeal of crystal-clear visibility
—and protection—by laminating with Du Pont Acetate Film. For further
information, send for free booklet "Building a Selling Package with
Du Pont Acetate Film." Mail the coupon today!

Please send me fi	ee booklet "Building a Selling Package
with Du Pont Ace	ate Film."
Name	Title















From the Gardner Gallery of Jamous American Packages



... (IT COULD VERY WELL BE)

If "like attracts like" then it's not surprising that so many of the fine products on the nation's shelves wear Gardner cartons.

For just as these products have earned the confidence of consumers so have Gardner cartons earned the confidence of manufacturers. And we believe this confidence comes from something more than a knowledge of Gardner's extensive physical facilities.

Here at Gardner we believe in never being quite satisfied with a good job. We feel an obligation to ourselves—and to our customers—to do even better, tomorrow, what we have gained recognition for doing well, today.

We think that's an even more important reason why you'll find so many of America's most famous products packaged in Gardner cartons.

THE GARDNER BOARD AND CARTON CO.

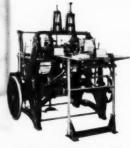
Manufacturers of Folding Cartons and Boxboards

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio Sales office in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis





This time by the makers of Kleenex* Pocket Pack Tissues for quantity production of Counter Display Cartons



the STANDARD BRIGHTWOOD Forms hinged-cover, telescope, trays, and tapered boxes in a wide variety of sizes at speeds up to 60 or more

finished boxes per minute.

Manufacturers who produce their own boxes and cartons, as well as commercial box makers are sold on U.S. Automatic carton-forming machinery because they can rapidly turn out precisely-formed, solidly-glued boxes. The manufacturers of Kleenex Pocket Pack Tissues, use Standard Brightwood carton-forming machinery to make the attractive counter display cartons shown above. Each of their Standard Brightwood Machines turns out more than 60 display cartons per minute. Should a new design be developed or a different size be required, these Standard Brightwoods may be changed over easily and quickly to handle other sizes of cartons.

And it is this speed and versatility that appeals to the commercial producer who is called on continually to turn out varying sized cartons in large quantities and often on short notice. Whether you produce boxes for your own use or for others, it will pay you to learn the advantages you can enjoy when you use packaging machinery made by **US.** Write **US** today, giving complete details of your problem.

*T.M. REG. U.S. PAT. OFF. I.C.P. CO., CHGO.

U. S. AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. * CARTONING MACHINERY CORP.

122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York * Cleveland * Chicago

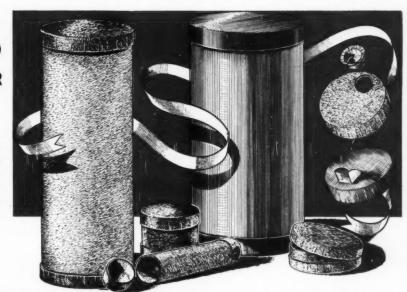


Net and Gross Weighing Package Forming and Filling Carton Sealing, Lining, Wrapping, Box Making

MODERN PACKAGING

The CLEVELAND CONTAINER CO.

presents the first of a series of informative messages to assist all those who manufacture, distribute or sell products which require more efficient, economical and attractive packaging.



FUNDAMENTALS OF CONTAINERS IN PACKAGING!

TYPE No. 1-PLAIN ALL FIBRE CAN

PRICE ADVANTAGE . . . The LOWEST priced in the field of fibre cylindrical containers!

STURDY CONSTRUCTION . . . Quality chipboard in the sidewall provides rigidity. The bottom, a well formed cap, firmly glued on. The top cap is assembled loose and shrunk to the sidewall of the body of the container and provides a snug friction fit. Note also . . . pouring spout cap and pouring plug cap, illustrated above. Die cut embossed caps also available.

WIDE RANGE OF SIZES . . . Produced in diameters from a minimum of 1/4'' to 71/2'' maximum. Lengths as desired.

OPTIONAL, ADDITIONAL FEATURES . . . ADDED PROTECTION TO CONTENTS: Moisture resistant or grease proof barriers are provided by lining interiors with paraffin, glassine, parchment, aluminum foil, anti-corrosive paper, or other lining materials, as the customer may desire.

Tell us your needs.

Our large production capacity . . . conveniently located plants ensure prompt customer service at low cost.

Why pay more?

For the best . . .

Call CLEVELAND!

VARIOUS EXTERIOR TREATMENTS . . . Colored spiral wraps may be specified and added for individuality. With certain sizes of containers, one color printing or a continuous printed wrap can be spiraled on all sizes at a definite saving, as compared with the cost of the labeled type container.

MULTIPLE PACKING ADVANTAGES . . . To ensure safe delivery, your CLEVELAND CONTAINERS are packed in high test corrugated shipping cartons for convenient handling, and to reduce valuable storage space.

This No. 1 all fibre can is excellent for packaging all types of dry products, such as chemicals, drugs, insecticides, detergents, cleansers, deodorants, dry foods, moth crystals, water softeners, seeds and similar products.

It provides added SAFETY and LOW COST for packaging many miscellaneous products, such as leather valves, washers, bearings, nuts, bolts, tape, bushings, spare parts, typewriter ribbon rolls, wire coils, etc.

Additional copies of this message available on request.

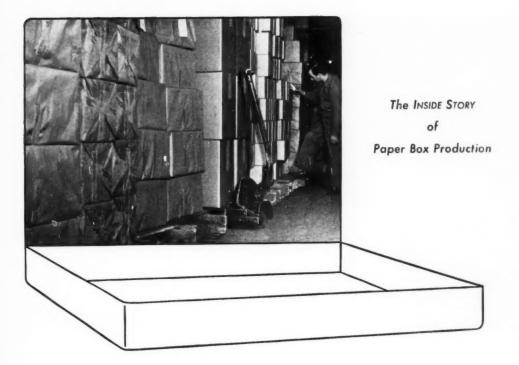
CLEVELAND CONTAINER

All-Fibre Cans • Combination Metal and Paper Cans
 Spirally Wound Tubes and Cores for all Purposes

PANTS AND SAILS OFFICES: Cleveland, Detroit, Chicago, Plymouth, Wisc., Jamesburg, N. J. Ogdensburg, N. Y. + ARRASIVE DIVISION at Cleveland SAILS OFFICES: Grand Central Terminal Blag, New York City, Washington Gas Light Bidg., Washington, D. C.: West Hertfard, Cenn.; Rechester, N. Y. Cleveland Centraler Condes. IAI. Proscott, Ontain - Offices in Teament and Memerica







Use our floor space instead of yours!

If a shortage of storage space keeps you from enjoying the economy of larger-scale purchases in paper boxes . . . Miller can answer your problem! Here we are equipped to store customers' orders for seasonal requirements over a limited period, with partial shipments as specified. The picture shows finished set-up boxes, wrapped and stacked, ready to go when their owner gives the word.

Is your present box short on eye-appeal? Is it short on strength? Does it identify the contents too slowly? Arriving at the best box for your purpose is not simple; but it can be done, and we can do it. If you feel that your present packaging may fall short of perfection, why not talk things over with a Miller representative? The coupon will bring him promptly, and no obligation.

WALTER P. MILLER CO., INC. 452 York Avenue, Philadelphia 23, Pa.

We'll be glad to talk packaging with your representative, with the understanding that no obligation is involved. Better have him call up ahead of time for an appointment.

City......Zone.....State.....

OXES AS2 YORK AVENUE, PHILADELPHIA 23, PA.

DESIGNERS AND MANUFACTURERS OF SET-UP PAPER BOXES



RADO **PACKAGES**

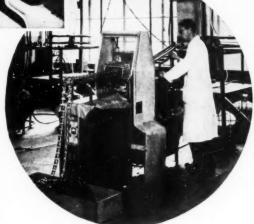
OPEN AMAZING NEW SALES POSSIBILITIES

RADO PACKAGES® are the sort of things Sales Managers and Marketing Directors dream of but rarely findpractical, radically new, low-cost packages that ideally lend themselves to all-out consumer promotion.

RADO PACKAGES are all plastic. They are made automatically and continuously from a wide range of thermoplastic materials, both clear and opaque. The packages are made and filled simultaneously and can be of regular or irregular shape.

Equally suitable for liquids or pastes, RADO PACK-AGES can even be produced in the form of unique capless collapsible tubes which have self-sealing apertures.

If you feel your product could benefit from this new type of packaging that is novel, practical, low-cost and wonderfully responsive to consumer promotion, write to the Main Office of Technopol Laboratories, or to the Packaging Service Station nearest you for additional facts.



Type "A" Packaging Machine

*U.S.A. Patent Nos. 2,517,027, 2,530,400 British Patent Nos. 599174, 599183 Patented in 36 other countries. Other patents pending.

TECHNOPOL LABORATORIES LIMITED

Tel: London Wall 9452-9453 • 212 St. John Street, LONDON, E. C. 1, England • Cables: Telabor, London

factories and Packaging Service Stations:

UNION OF S. AFRICA UNIVERSAL PLASTIC PACKS (PTY.) LTD. 43/44, Menteith House, Smith Street, DURBAN.

SWITZERLAND
GISIGER & CO.
Office: Claridenhof.
Dreikonigstrasse 21. ZURICH. Tel: (051) 27.24.47/

Factory: Obfelden.

FRANCE
(Algiers, Tunis, Morocco)
S. E. P. (Soc. d'Emballages
Plastiques)
Office: Rue Notre-Damedes-Champs,
PARIS 6e. Telephone
ODEON 71-33.

24 Avenue de la Republic, CHATOU, France. Tel: 274. Factory:

AUSTRIA
Tupla Gesellachaft. Vienna
IV., Wiedner Haupstrasse 8
Telephone: A 34067
Telephone: A 34067
Telephone: A 34067
Telephone: A 34067

(Holland, Luxemb'g, Belgian Congo; S. E. P. (Soc. d'Exparsion des Matieres Plastiques) Office: 41 Rue de la Val-lee.

Omee: lee. (Onderbergen), GAND.
Tel: 594.96.
Factory: 68-7 Rue de l'Agrafe.
Anderlecht,
BRUSSELS.
Tel: 22,19,32.



It has changed a lot inside, too!

The modern drugstore is a far cry from this old-timer—inside and out.

Good-by to ancient prescription jars and paper packages for powders. Today, as you know, thousands of drugs are packaged in modern, sanitary containers such

as those shown below.

Many such containers have been pioneered by American Can Company since 1901.

Canco will continue to pioneer improvements for its customers in many businesses . . . in many fields.





"Cartontite"

ODERN high-speed packaging requires modern super-speed Adhesives! Paisley Scientific Research has anticipated industry's needs. "CAR-TONTITE" is one of the remarkable new, fastsetting, odorless, non-toxic Glues that have been specially designed for high speed operations. It's the leader of a complete, better line of Paisley scientifically developed Adhesives for every carton sealing operation. "CARTONTITE" gives "instant-tack" Performs with equal efficiency on fully or semi-automatic machines such as Pneumatic Scale, Triangle, Stokes & Smith, Package Machinery, National, Ferguson, R.A. Jones & Co. and others. You can expect continuous production hour after hour on all types of cartons and stocks. Benefit from the newest developments in Scientific Carton Adhesive Engineering . .

TEAR OUT - FASTEN TO LETTERHEAD AND MAIL TODAY

	Send Free "CARTONTITE" Laboratory Report No. 7528.
	Send trial 5 gal. shipment of "CARTONTITE" at 55 gal. drum price,
	Send Adhesive Operation Data Sheet (You fill in and return for Laboratory reports and recommendations.)
FIRE	ч
STR	EET

FIGURE 1. APPLYING THE CARTON GLUE



CARTON BOARD

FIGURE 2.

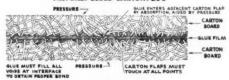


FIGURE 5.



ADMESIVE MUST "SET" BETWEEN, LOCKING ALL PIBRES, BEFORE PRESSURE IS RELEASED

COPYRIGHT 1949 PAISLEY PRODUCTS, INC.

Illustrates the accepted method of applying Carton Glue to porous Cartonboard surfaces. Shows results of proper and improper applications.

PRODUCTS INCORPORATED MORNINGSTAR, NICOL, INC.

Manufacturers of Glues · Pastes · Resin Adhesives · Cements and related Chemical Products

CITY

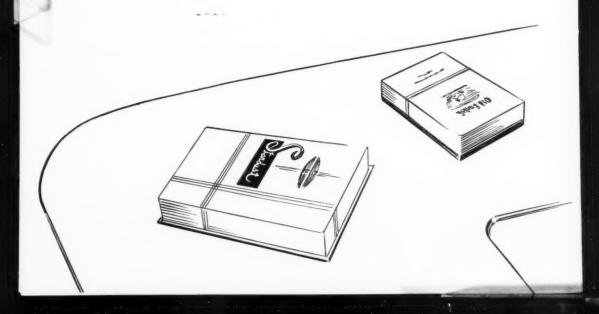
More Sales...

with Kromekote

COLORCAST BOX WRAP

made only by

The Champion Paper and Fibre Co.







Champion and *only* Champion manufactures the KROMEKOTE line of cast coated papers.

The registered trade-mark



means manufactured by

THE CHAMPION PAPER AND FIBRE CO.

General Offices: HAMILTON, OHIO

Give Your Product a "BREATHER"



with New Heat Sealable

...low-cost "breather" container for naphthalene crystals, chemicals, coffee, tea, spices, dried foodsmany other products!

Now . . . amazing new viskon for product packaging where porosity, product breathing, absorption, diffusion, infusion and wet strength are needed. Already proved successful in many applications. VISKON can help you speed production, cut costs and increase customer acceptance. viskon can do the same for your product as well!

VISKON is made of tough rayon and cotton fibers bonded together with cellulose . . . with spectacular characteristics ideally suited for packaging. VISKON prints readily, is non-raveling, lint-free --odorless, tasteless, non-toxic and completely sanitary. It is furnished in mill rolls, tapes or sheets-in a large selection of grades and weights. Whatever your container problem, investigate low-cost VISKON now . . . mail coupon for complete information today!

VISKON® nonwoven

another product to fit today's needs by

THE VISKING CORPORATION NORTH LITTLE ROCK, ARKANSAS

VISKON IS ECONOMICALI

Costs less than popular woven materials-a fraction more than paper . . . yet matches or exceeds their performance!

VISKON IS HEAT SEALABLE!

Generally speaking, Viskon seals at between 350° and 500°F., corresponding with dwell

VISKON IS STRONG AND DURABLE!

Holds its shape, yet is soft and flexible. Viskon has exceptionally high wet strength.

VISKON IS TASTELESS, ODOR-FREE!

Completely sanitary for use as a food container. Lint-free and non-raveling.

THE VISKING CORPORATION, Dept. MA Box 76, North Little Rock, Ark. Please rush complete information about VISKON for use as a product container. Address



people want Fine Paper Boxes



Rowell makes them



COSMETIC BOXES

E.N. Rowell Co. Inc.
Manufacturers of Fine Paper Boxes
BATAVIA. N.Y.



SEE CROWN'S NEW RIGID * REVERSIBLE * PLASTIC POR-RITE SPOUT



NOW AVAILABLE ON 5 GALLON PAILS and DRUMS

Crown's POR-RITE SPOUT
hooks on to opening into which
contents are poured...extends to
edge of its container to eliminate container interference.

Crown's POR-RITE SPOUT is reversible . . . permits stacking . . . saves in shipping . . . larger nozzle permits faster filling . . . tamperproof over-cap protection.

Crown's POR-RITE SPOUT provides dual purpose pail or drum-type container with controlled pouring assured.

Crown's POR-RITE SPOUT is rustproof... available in various colors. to designate different products.

CROWN CAN

ONE OF AMERICA'S LARGEST CAN MANUFACTURERS
DIVISION OF CROWN CORK & SEAL COMPANY

PLANTS AT PHILADELPHIA, CHICAGO, ORLANDO . BRANCH OFFICES: MEW YORK, BALTIMORE, PITTSBURGH, ST. LOUIS

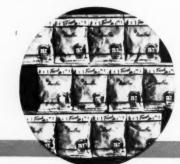
How Waxed Paper

Successful food merchandising





In today's self-service stores, your brand name is your most valuable sales asset. Your packaging must tie in with your brand advertising and promotion... should make your brand stand out on the shelf. Economical waxed paper packaging gives you these important brand merchandising advantages at low cost.



MAXIMUM DISPLAY VALUE

A basic family design on low-cost waxed paper packages ties your entire line together. Increases sales of all your products; brings you more sales for the money you spend to advertise your fastest moving items; and insures quicker consumer recognition of your brand name.



UNIFORM PRODUCT APPEARANCE

You build consumer confidence . . . and repeat sales . . . when your product is packaged to look fresh, flavorful, and appetizing. Colorful waxed paper packaging combines strong brand identification with appetizing product illustration to provide uniform packaging with proven sales appeal . . . at substantial packaging savings.

SELL MORE... MORE PROFITABLY... WITH

helps sell your brand at low cost

... is brand merchandising

CONSUMER ACCEPTANCE



Because millions of housewives use waxed paper every day to protect the flavor and freshness of foods in the home, you capitalize on this tremendous consumer acceptance when you package your bread in waxed paper. For women have complete confidence in waxed paper's protective qualities; buy products in waxed paper packaging.





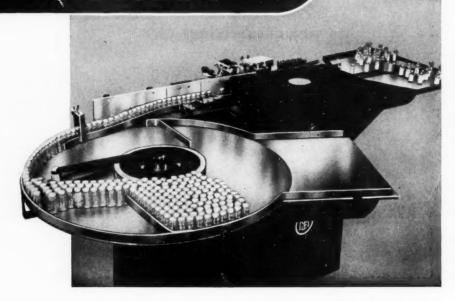
MODERN

WAXED PAPER

WAXED PAPER INSTITUTE, INC., 38 S. DEARBORN ST., CHICAGO 3, ILL.

JULY 1952

THE BANKS



Of Unique Design and Principle. A High Speed Fully Automatic BODY LABELLING MACHINE for Cylindrical Containers, Fitted with Electric "No Bottle — No Label" Device.

Precision labelling from 2,400 – 10,200 units per hour using one label stack only.

The "Banks" Labeller is simple to operate, occupies very little space, and positions the labels positively, accurately, and without any trace of surplus gum beyond the edges of the label, irrespective of the label shape or size.

Change from one size of container to another is obtained in a matter of seconds.

Cleaning down takes only a few minutes.

All models arranged for conveyor feed, or alternatively, Patented Automatic Infeed

Rotary Tables. The machine illustrated is fitted with Patented Automatic Infeed Rotary Table and is labelling penicillin vials.

Manufactured in 6 models suitable for use in breweries, mineral water, food, cosmetic and chemical factories, and the like.

Each model will label all round or part up to the label width capacity of the machine, from ½" up to 12" wide.

MODEL B. L. M. 3 will fix back and front labels

Over 1,000 machines are at work in or on order for THIRTY Countries and 174 Towns and Cities in Great Britain.

Manufactured by Morgan Fairest Ltd., Sheffield, England



PACKAGING MACHINERY
Frankfort

SESMITH @

Philadelphia 24, U.S.A.

Subsidiary of Food Machinery and

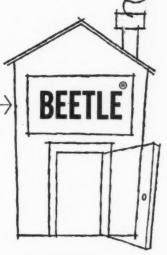
Chemical Corporation

for better "housing conditions"...

The new Waring Duo-Speed Blendor Celebrity Model PB-5, designed by Mr. Collura and housed in BEETLE plastic. Molded by Watertown Mfg. Co., Watertown, Conn.







the Waring Blendor has moved into BEETLE plastic!

Here are the reasons why Industrial Designer Francesco Collura specified BERTLE plastic for the new addition to the famous Waring Blendor line:

For color permanence... molded-in color that can't flake off, that eliminates the need for painting or plating, that gives lifetime color to any product.

For heat resistance . . . thermosetting BEETLE plastic is unaffected by motor heat, so it's the ideal material for electrical appliances requiring trim-looking, compact housings.

For excellent molding properties . . . Designer Collura also preferred BENTLE because it molds so easily and economically, and because its strength is out of all proportion to its light weight. (BENTLE weighs about one fifth as much

all proportion to its light weight. (BEETLE weighs about one-fifth as much as zinc, is lighter than most other housing materials... prime considerations in shipping.)

Francisco Collure, S.I.D., noted Industrial Designer, who specified BEETLE planting for the new Waring Blacker.

For stein resistance... water, perspiration, fruit and vegetable juices can't harm BEETLE, and it resists many other types of stains as well.

Got a housing problem in connection with your product? BRETLE plastic has increased the efficiency, beauty and sales appeal of so many other products, it may be the answer for you, too! Why not consult us and see.

We may be able to help you meet military specifications where plastics and resins are concerned. What's your problem?

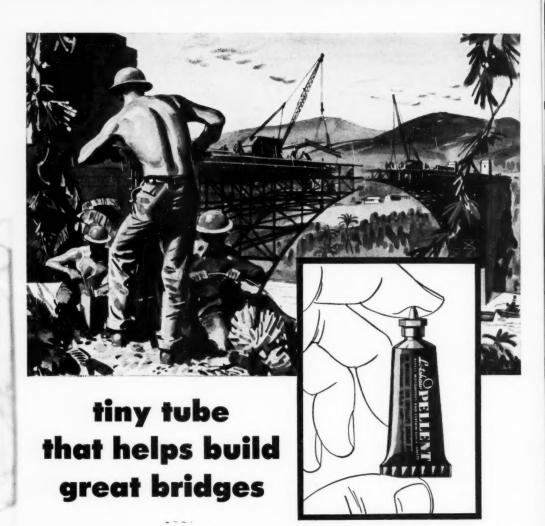


AMERICAN Gyanamid COMPANY

PLASTICS DEPARTMENT

32C ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

In Comment of Street, Street, Comment of Street, Stree



A steel worker 200 feet up in the air can find it dangerous to slap at mosquitoes! That's where Medical Supply Company's remarkable Pellent comes to the rescue. Just a little Pellent rubbed on the skin keeps insects away, protects health, speeds up the job.

Workers use Pellent because it comes in a small tube. It's convenient to carry . . . contains the correct amount for a single application . . . safe where glass wouldn't be. What's more, the ingenious spear-type cap makes the tube easy to open anywhere.

This handy Pellent tube is just one example of how Sun Tube experts meet a packager's specific problem with the perfect tube for the job.

If you would like to know how specially designed Sun Tubes can increase use of your product, won't you call your Sun Tube representative or send him a card today?

SunTube Corporation

HOME OFFICE: 181 LONG AVENUE, HILLSIDE 5, N. J. • TEL. WAVERLY 3-0400 Plants: Hillside, N. J.; Washington, N. J.; So. San Francisco, Calif.; Ottowe, Can.; Mexico City, Mex.

Chicago 3, Ill. Sun Tube Corporation, 37 So. Wabash Ave. St. Louis 1, Mo. M. P. Yates. Arcade Building Cincinnati 8, Ohio Ralph H. Auch, 3449 Custer Road New Orleans 19, La. R. P. Anderson Co., 925 No. Solomon Pt.

Corporation, 37 So, Wabash Ave.
M.P. Yates, Areade Building alph H. Auch, 3449 Custer Road nderson Co., 925 No. Solomon Pl.
Los Angeles, Calif. Sun Tube Corp., Phone: MAdison 6-9980



FISHER'S FOILS

FISHER'S FOILS LIMITED WEMBLEY MIDDLESEX ENGLAND TELEPHONE: WEMBLEY (ABC CODE 6TH EDN)





It most certainly is, when you realize how many of America's foremost producers of macaroni and egg noodles are Pneumatic customers!

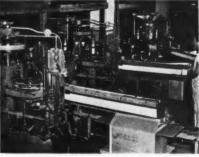
Like C. F. Mueller Co., makers of Mueller's Macaroni, most of these famous manufacturers are long-time users of Pneumatic packaging machines. Long enough to test them . . thoroughly . . and to convince themselves that nothing can quite match the operating efficiency and economy of Pneumatic equipment.

The whys and wherefores of Pneumatic's "lower cost per container" performance will interest any one considering the purchase of packaging equipment. When that time comes for you . . . get all the facts, from Pneumatic.

PNEUMATIC SCALE CORP., LTD., 82 Newport Avenue, Quincy 71, Massachusetts. Also: New York; Chicago; San Francisco; Los Angeles; Seattle; Leeds, England.

FAMOUS MACARONIS PACKAGED ON PNEUMATIC MACHINES

BAY STATE KEYSTONE RONZONI PRINCE CREAMETTES KRAFT DINNER CONTE LUNA CATELLI PARAMOUNT LA ROSA PROCINO-ROSSI BRAVO DEL MONICO VIMCO GIOIA RAVARINO-FRESCHI



Pneumatic carton feeding and bottom sealing equipment in operation at C. F. Mueller plant in Jersey City, N. J.

PNEUMATIC

PACKAGING AND BOTTLING MACHINERY



50% SAVING in box sealing costs resulted when this manufacturer installed semi-automatic box sealers which cut and apply set lengths of "Scotch" Cellophane Tape.



HIGH-SPEED BOX SEALER turns out 60 perfectly sealed boxes a minute automatically at the Boston plant of Gillette Safety Razor Company.



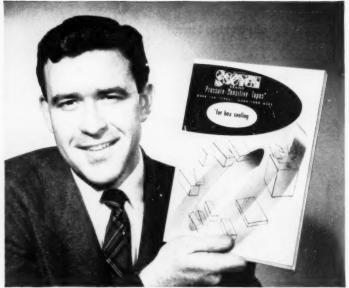
TREATED BOXES are tightly sealed with "Scotch" Acetate Fibre Tape. This transparent tape sticks fast on treated papers, foils and laminates.



SPECIAL HOLIDAY SLEEVES are held in place invisibly with transparent "Scotch" Cellophane Tape. Simple, easily-operated dispensers speed all kinds of sealing jobs.



CODING, DECORATING call for "Scotch" Cellophane Tape in 13 brilliant colors besides the familiar transparent variety. All stick at a touch without moistening.



"This booklet showed us how to cut our box-sealing costs!"

GET YOUR FREE COPY of this new folder! It tells how to simplify your box-sealing operation, do a better job faster with the help of "Scotch" Pressure-Sensitive Tapes.

Actual application photos show you how well-known manufacturers have solved some of their packaging problems, are enjoying new savings with this *modern* way of sealing with tape.

Use coupon below for your free copy . . . send it in today!

Minnesota Mining & Mfg. Co. MP-72 St. Paul 6, Minnesota Please send brochure on Box Sealing, Have a representative call.	SCOTCH
Name	Pressure-Sensitive Tapes
Address. City. Zone State.	Scoren

The term "Scotch" and the plaid design are registered trade marks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 270 Park Avenue, New York 17, N. Y. In Canada: London, Ont., Can.

For color-bright, velvet-finish printing on

Tissue-Sulphite-Kraft

and other absorbent papers



BBD "SHIRT-SLEEVE" SERVICE

If you have an aniline or gravure ink problem... put it up to a "shirt-sleeve" BBD specialist. You can rely on the BBD field-man in your locality for valuable technical assistance because his own practical pressroom experi-

ence is backed by the specialized know-how of the entire BBD organization.

Find out how BBD VELVA-TEX INK and BBD "shirt-sleeve" service can give you improved printing results...economically. Contact your nearest BBD office or write direct to BENSING BROS. & DEENEY, 3301 Hunting Park Avenue, Philadelphia 29, Pa.

A new alcohol-soluble ink that prints with a richly smooth, flat finish on all absorbent stocks. Ideal for gift, display, trademark and other decorative papers... as well as bags and wraps, shelf liners and other specialties. Excellent for lightweight tissue because it does not curl or wrinkle stock. VELVATEX has high color strength to effectively hide paper structure. It lays smoothly—gives uniform coverage of solids and clean, sharp type reproduction. Resistant to water and rubbing, VELVA-TEX also has a high block-point...stands up under corrugating, wet and dry hot die-cutting and creasing. Costs just a little more than water-soluble inks. Available in a full range of eye-appealing standard colors...or in shades to match your specifications.



Bensing Bros. and Deeney

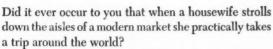
World's Largest Makers of Aniline Ink PHILADELPHIA · CHICAGO · WAKEFIELD, MASS.

Pacific Coast: A. M. BOJANOWER, Los Angeles Export: McLAURIN-JONES CO., New York Canada: MANTON BROS., Toronto



PUTTING THE WORLD IN





Within her reach are the choicest fruits and vegetables grown in America, meat from a dozen states, fish from the seven seas, coffee from our good neighbors to the south, tea from the Orient and delicacies from both the New and Old Worlds.

These foods travel miles to her market basket, and are available irrespective of season. For example:

Her family can eat tomatoes, peas and sweet corn when snow covers much of the farmland where these crops are grown. They can enjoy spinach, beans and asparagus when the fields are bare and brown. They can enjoy apples, peaches, pears and cherries when there's not a sign of fruit on the trees.

A big share of this canned food that puts "the world in your market basket" 365 days a year is in Continental containers bearing famous names and brands that are your guarantee of quality. In addition to cans for food, Continental makes more than 500 sizes and styles of containers for products like oil, drugs, cosmetics, household conveniences and paints.

Everybody at Continental realizes that providing a dependable source of cans and other containers is a tremendous responsibility. And we will do our utmost to meet every demand for them in these critical times.





100 E. 42nd ST., NEW YORK 17, N. Y.

















Labelsmiths

Gold and Silver

E Composed Seals

HOW WOULD EMBOSSED FOIL SEALS LOOK?

The sketches we design give a perfect picture of how much beauty and dignity foil seals add to the products, anniversary, convention or similar events. How would embossed foil seals look? It's so easy to find out . . . FREE! with the coupon below.

IT'S EASY TO FIND OUT FREE!

How would foil seals look? On products, letterhead, labels, seals or booklet

Please send me a sketch on GOLD SILVER foil approx. size with the following copy

My Name Company

Approx. Quantity

Designers and Producers of Pine Labels

Labelsmiths

*GUMMED or UNGUMMED • HEAT SEAL
PRESSURE SENSITIVE ALL AT LOWEST PRICES

a. m. steigerwald

910 W. VAN BUREN ST., CHICAGO 7, ILL. TAYLOR 9-5400 CHARLOTTE, MICH.

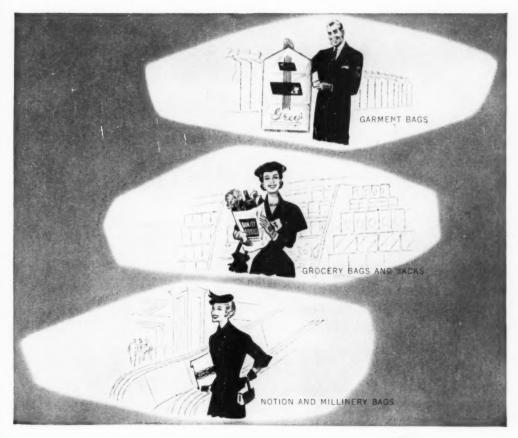
L. M. Clark 612 So. Pleasant St.

*The same offer is good for other types of Labels

A. C. and J. S. Foster 310 Hippodrome Bldg. CHerry 1-2468 DANVILLE, ILL. F. F. Michenfelder 1208 Sheridan St. DAnville 4447J Joe Herrmann 416 Jefferson St. WAhash 1257

MEMPHIS Edward Magnus 278 S. Front St. MEmphis 8-2574 MINNEAPOLIS
J. E. Moor
3329 DuPont Ave., So.
LOcust 5309

NEW YORK, N. Y. John H. McLaren 646 W. 125th St. MOnument 2-0237 OAKLAND Jean S. Ponten 688 Sixteenth St. TEmplebar 2-1745 ST. LOUIS Marvin & Phil Yates Arcade Bldg. GArfield 0741



Gaylord Bags They're good looking and they can take it



Shown above are just three of the wide variety of Gaylord Kraft bags. Their extra strength, full weight, uniform size and smart appearance make them popular with customers, proprietors and clerks alike.

If your bag requirements are exacting, Gaylord should be your source of supply.

GAYLORD CONTAINER CORPORATION . General Offices: ST. LOUIS

KRAFT BAGS AND SACKS . KRAFT PAPER AND SPECIALTIES . CORRUGATED AND SOLID FIBRE BOXES . FOLDING CARTONS
JULY 1952



Tupper Seal, air and liguid tight flexible covers fit, and are included in the sets of all Tupperware Canisters.



The Tupperware 50 oz. Canister is "standard equipped" with the Tupper Seal, air and liq-uid-tight flexible Pour All



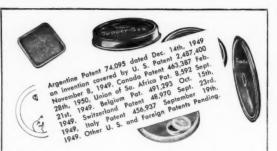
The Tupper Seal, air and liquid-tight flexible Pour All cover is used on every Tupperware 20 oz. Canister.



The Tupper Seal, air and liquid-tight, Pour All cover as a cover for 46 oz. cans; Tupperware Sauce Dishes and other containers of metal, glass or pottery. Foods easily dispensed without removing entire cover.



The Tupperware Wonder Bowls are usually fitted with Tupper Seal, air and liquid



TUPPER / Seals

air and liquid-tight, flexible covers air and liquid-tight, Hexible covers for Tupperware Tumblers, Canis-ters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the con-tents of which it is desired to keep fresh and wholesome.



UPPER !



9th November, 1949

EXCLUSIVE!

FORMAL NOTICE!

U. S. Patent #2,487,400

The Tupper Corporation has attained a position of leadership in this industry by incurring great expense and expending painstaking effort in the development, design, manufacture and exploitation of its many world-known products.

The Tupper Corporation further has anticipated the inevitable attacks to which leadership is subject and has taken measures provided by law to preserve the creative rights to its products, methods and design by patent protection both in the United States and abroad.

Tupper Seals for Tupperware shown in this advertisement are just a few of the forms covered in this manner and are specifically covered by U.S. Patent #2,487,400.

Only the Tupper Corporation, by U.S. Patent #2,487,400 has the right to make, use and vend container closures in connection with any and all types of containers throughout the United States and its territories as covered by the claims of the Patent.

Tupper Corporation will protect, according to law, the exclusive rights above granted

TUPPER CORPORATION

UPPER CORPORATION

JIPPED Manufacturers of - CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS FACTORIES: Farnumsville, Mass., and Cuero, Texas New York Show Rooms 225 Fifth Ave. ADDRESS ALL COMMUNICATIONS TO: Department MP-7

COPYRIGHT TUPPER CORPORATION 1950



There's a Tupper Seal, air and liquid-tight flexible cover for Tupperware 2, 8 and 121/2 oz. Tumblers too, and these Tupper Seal, covers fit many other containers of metal, glass and crockery.

The Tupper Seal, air and liquid-tight flexible Por Top cover, specially deigned as a dispensing cover for specified diam eters of containers holding foods such as syrups salad dressings, catsup.



The cover of the Tupper ware Bread Server which serves as a bread tray also is designed to give similar results as Tupper Seal, air and liquid-tight Flexible covers. Keeps contents fresh as no other such container.



When equipped with Tupper Seal, air and liquidtight, flexible covers, **Tupperware Cereal Bowls** serve many another purpose.



The Tupper Seal, air and liquid-tight flexible cover made for Tupperware 8 oz. Tumblers also fits and is sold with all Tupperware Funnels as a base when funnels are used as storage containers.



For the glittering eye-appeal that sets your product apart from all others... for the pick-up appeal that urges customers to buy... there's nothing like brilliant, precision-printed Milprint foil packages. Milprint was the first to print foil successfully... still leads the field

in creating saleswinning packages. *Because Milprint also leads in offering an outstanding design staff and the widest variety of packaging materials and printing processes, you can always be sure of getting the right packaging for your product from Milprint. Just remember to call your Milprint man—first!

This insert printed by Milprint

Milprint INC

General Offices, Milwaukee, Wis. - Sales Offices in Frincipal Cities

Printed Cellophane, Pliofilm, Polyethylene, Assessine, Foils, Folding Cartons, Bags, Lithographed Displays, Printed Promotional Material



with International Stapling Machine

Uarco, Inc., Chicago manufacturers of business forms reports a saving of more than \$1650 a month with an International Retractable Anvil stapling machine.

The stapler, a double headed, air operated model priced at only \$3,400 (it almost paid for itself in 60 days), is used to close filled cartons from the outside, top and bottom simultaneously. Daily volume is 2,500 cartons of various sizes . . . in a 12-hour period.

75% SAVING IN MAN HOURS . . . Prior to 1947,

Uarco closed cartons by another method. Processing 2,500 cartons required 48 man-hours. Today, with an International Retractable Anvil Stapling Machine, it takes only 12 man-hours to close 2,500 cartons.

"HIGHLY SATISFACTORY"... Here's what John A. Tanovich, chief layout-material handling engineer has to say about International stapling equipment: "We have found your C2E carton stapling machine a highly satisfactory unit with the desired flexibility to staple any of our cartons to meet the packaging requirements of interstate shipments. When coupled with our system of conveyors, this stapling machine accounted for a minimum of \$20,000 per year as its share of packaging savings."

What's your closure problem? If you ship in corrugated or fibre containers, an International staple machine can close them better, faster and more economically. Write for detailed information.



All International Staple Machines feature the penetration control which permits either standard or concealed staple clinching as shown in actual size cross section view at left.

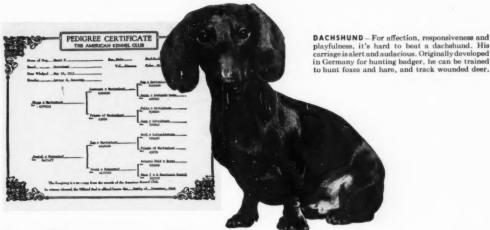
a seal of security-



INTERNATIONAL STAPLE & MACHINE CO.

806 Herrin Street, Herrin, Illinois Distributors in principal cities

A Pedigree is a Promise of Quality



In Boxes, Too....



MAKERS of famous national brand products look for consistent quality, consistent service and fair price from their box suppliers. That's why Colgate-Palmolive-Peet ship Vel, the household detergent used by countless housewives, in Union Corrugated Containers...the boxes with a pedigree.

75 years of leadership in flexible packaging goes into Union boxes. Every step in the making, from timber to finished box, is quality-controlled by one management in America's largest pulp-to-container plant.

Tremendous forest resources, four modern box plants and five of the nine largest paper machines in the world make Union a dependable container source for any large volume shipper.

That's why, every month, more makers of famous brand products ship in Union boxes.

UNION Corrugated Containers UNION BAG & Paper Corporation

Principal Offices: WOOLWORTH BLDG., NEW YORK 7, N. Y.

Corrugated Container Plants: SAVANNAH, GEORGIA · CHICAGO, ILLINOIS · TRENTON, NEW JERSEY



Stocker, the only manufacturer that can custom-reinforce gummed tape and wrapping paper to your particular needs, now offers GRIPSON JH-52 Waterproofing Agent. This revolutionary formula, when used with FASCO, GLASPUN, etc., meets all government and industry specifications for waterproofing tape applications.

Manufacturers of the famous

GLASPUN Corrugators & Sealing Tape

GRIPSON

Clay Filled Cambrics Duplex and Corrugators Kraft Sisal Tape

Sealing Tape—Plain, Printed and Colored Hollands and Specialty Cambrics Set-up Box Stay

JH-52 Waterproofing Agent Printing and Other Packaging Materials

Veneers

Consult our representatives, who are packaging specialists, on our complete line of gummed tapes and tailor-made reinforced and plain waterproof wrapping papers.

Stocker MANUFACTURIN

MANUFACTURING COMPANY*

Main Offices & Plant: Netcong, New Jersey
Sales Offices: New York...Boston...Cleveland...Chicago

Philadelphia...Atlanta...Nashville...Havana, Cuba San Francisco...Houston...Des Moines

* Affiliated with Camp Manufacturing Company, Franklin, Virginia, producers of specification kraft, chemical pulp and paper and corrugating medium, assuring uninterrupted service on your gummed tape and waterproof paper requirements.

MAKE IT RIGHT AND SEAL IT TIGHT WITH GUMMED TAPE

SYLVANIA CELLOPHANE



Sylvania Cellophane is widely used for multiple-unit packaging—one of today's most effective methods for increasing sales—especially among impulse items. It permits immediate product identification. It is moisture-resistant—safeguards quality throughout shelf life. It is easily applied on high speed, automatic machines and is engineered

to meet an ever-widening variety of packaging needs.

If you would like to explore ways of utilizing your present supply of cellophane more effectively ... either through improved package design or the use of a different type or gauge . . write our Market Development Division.

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION



General Sales Office: 1617 Pennsylvania Blvd. Philadelphia 3, Pa.



- For sparkling color effects, greater sales appeal, you won't find a finer base paper than Nibroc White*... particularly if your product is packaged in a bag or sack.
- Nibroc White is an exceptionally tough, highly flexible sheet with a fine printing surface especially for all-over printing. It gives better protection—greater wet strength—is more pliable—more durable—helps make products more salable!
- For more than 50 years we have been developing outstanding papers like Nibroc White—papers engineered to meet a wide variety of packaging needs. Papers that handle better, print better, speed processing, reduce costs!
- Our Technical Service people will be glad to work with you to get a paper "tailored" to *your* specific needs—paper that will do the job better, faster, more economically. Write Dept. DR-7, Boston.

*Sold only to converters

PAPER helps the PACKAGE make the SALE

BROWN



COMPANY, Berlin, New Hampshire

CORPORATION, La Tuque, Quebec

General Sales Offices: 150 Causeway St., Boston 14, Mass. - Dominion Square Bldg., Montreal, Quebec

SOLKA & CELLATE PULPS · SOLKA-FLOC · NIBROC PAPERS · NIBROC TOWELS · NIBROC KOWTOWLS

BERMICO SEWER PIPE, CONDUIT & CORES · ONCO INSOLES · CHEMICALS



Cradled in cactus...packaging's newest news!

Yes, now they've even got that Mexican desert weed-cactus-working! And at a delicate, shock-insulating job-protecting some of our nation's most precious cargo!

Made into a wonderful cushioning material, it's cradling shipments of delicate flight instruments, expensive recording and laboratory equipment—many of the most prized packages of such well-known companies as General Electric and Allen B. Du Mont Laboratories, Inc.

The secret? Naugatuck Lotol.® This latex compound coats and bonds cactus fibers firmly and lastingly together to make a light, airy cushioning pad called Tulatex®. So resilient, it gives real space savings—so light, it means a big cut in shipping weight!

If you're a manufacturer, think of what Lotol can mean to you - specially com-

pounded to answer your specific needs in bonding, coating, dipping, sizing, or saturating.

Whatever your product, there's a good chance you can be helped by Naugatuck Chemical's fine basic materials and long experience in improving old products, helping to create new ones. Why not look into it today by writing to the address below.

*Made by Queen City Tulatex Corporation, Burlington, Vermont

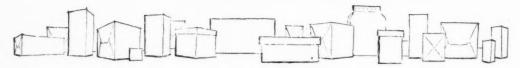
Vaugatuck Chemical Division of United States Rubber Company
207 ELM STREET, NAUGATUCK, CONNECTICUT

Branches: Akron • Boston • Charlotte • Chicago • Los Angeles • Memphis • New York • Philadelphia • In Canada : Naugatuck Chemicals, Elmira, Ont.

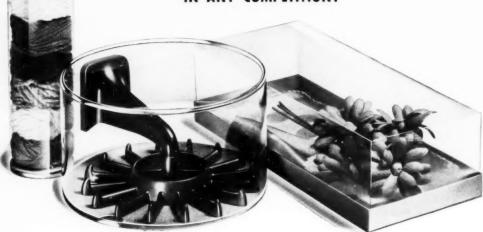
MARVINOL® vinyl resins • KRALASTIC® styrene copolymers • VIBRIN® polyester resins

Rubber Chemicals
Aromatics
Synthetic Rubber
gricultural Chemical
Reclaimed Rubber

Can Your Product Speak For Itself?







■ Today's "help-yourself" selling puts your product squarely on its own. Can it sell itself . . . does your product get the chance it deserves . . . is it handicapped in meeting competition?

On display—in a transparent container—merchandise demands attention , . . makes sales!

- Package companion products together in transparent acetate—you can get 2 sales for 1.
- Dress up staples in acetate—they sell for more!

More and more manufacturers depend on acetate's eye-catching salesmanship that works for dime store items as well as luxuries. Increase your business with this low-cost, hard-selling packaging. You don't have to pay the price of custom-made containers—stock boxes in all shapes and sizes are available from suppliers. If you want names of container manufacturers, write Celanese Corporation of America, Plastics Division, Dept. 108-G, 180 Madison Avenue, New York 16, N. Y. In Canada, Canadian Cellulose Products Limited, Montreal and Toronto,

Celanese

Acetate *Reg. U. S. Pat. Off

TRANSPARENT SHEETING

MODERN PACKAGING



specify Trojan Imperial sealing tape!

Every year millions of dollars and countless manhours go down the drain because of damage "in transit" to cartons and to merchandise. In handling tons of freight daily, getting it to the proper destination on time, much current waste and loss of revenue can be traced directly to improper packaging. The resulting damage and claims lead to investigation and paper-work, requiring supporting statements and invoices—plus clerical and valuable administrative time. Trojan Imperial Gummed Tape made by The Gummed Products Company can save many of these shipping dollars!

A good many customers judge your company and your product by the appearance and condition of the packages you ship—and a freight "packer" is only as good as the materials he uses. That's why thousands of companies, large and small, rely on Trojan Imperial, a stronger, better "standard" gummed tape made of top-quality Kraft paper and adhesive. It's a tough, flexible sealing tape that meets every requirement. For package-prestige, customer good-will and trouble-free service, get acquainted with the Paper Merchant in your community—the one who handles the Gummed Products line, and ask him for Trojan Imperial.

For speed, safety, and economy—on hand or machine-sealing operations in your plant, order Trojan Imperial Standard gummed tape—every time!

GUMMED PRODUCTS Company



OFFICES . TROY, OHIO . MILLS

Atlanta • Chicago • Cincinnati
Cleveland • Los Angeles • New York
Philadelphia • San Francisco • St. Louis



UHRISTMAS IS THE BEST TIME OF YEAR to invest a little extra in your packaging, to command a lot of extra sales. Products with popular gift appeal—such as beverages, tobacco, and cosmetics—just naturally move first and fastest when they're ready-packaged in Yuletide dress. Ridgelo custom-made, clay coated boxboard lends itself so well to this purpose that it is the automatic first choice of manufacturers' with a pride in their product and a sound knowledge of sales techniques.



Eustom Made FOR FINE FOLDING CARTONS

MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY

Representatives

H. B. Royce, Detroit Philip Rudolph & Sons, Inc., Philadelphia A. E. Kellogg, St. Louis Norman A. Buist, Los Angeles

Quantity

Forgotten is the bromidic "Quality not quantity" for our business at H-A is supplying glass containers in carload lots.

Beginning with the design of each bottle or jar, every step in the process of manufacture is controlled so that the end results are handsome, glistening, strong, economical, quality containers.

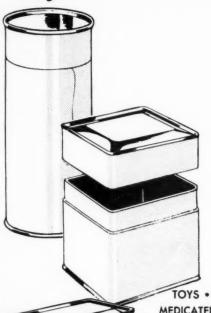
Whether you're buying half-ounce vials or gallon jugs, be assured that every sparkling H-A glass container is the best available.

SUCCESS SPEAKS FOR ITSELF!



scores of products packaged in

Sefton's string-opening cans are proof of their worth!



Tried often ... and never found wanting! That's why you can be sure Sefton's string-opening can is the perfect package for your product! Used successfully for a host of decidedly different products, this dependable can is factorysealed, tamper-proof and easy to open. Choose one-use style or with built-in re-closure.

OYS . AUTOMOTIVE REPAIR PARTS . VETERINARIAN SUPPLIES MEDICATED BANDAGES . ICE CREAM . TIRE PATCHES . COFFEE MONOSODIUM GLUTAMATE . CHEESE . CANDY . GIFT PRESERVES FROZEN FOODS . MOTH CRYSTALS . SPICES . FRUIT . CLEANSER **DETERGENTS • PISTON RINGS**

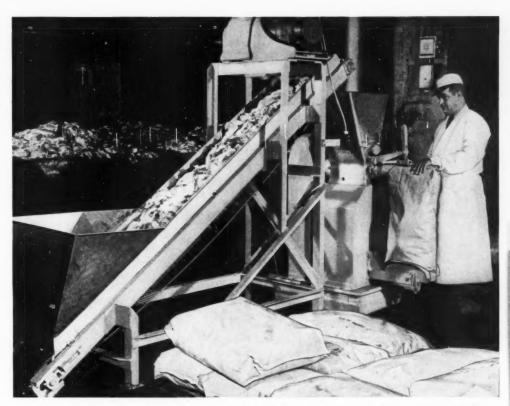


PAPER CANS ... SPIRAL AND CONVOLUTE PAPER AND METAL ENDS ROUND AND IRREGULAR SHAPES TUBES AND HEAVY CORES



PLANTS: ST. LOUIS . NEW ORLEANS PORTLAND, ORE. . PIQUA, OHIO DIVISION OF CONTAINER CORP. OF AMERICA

DISTRICT OFFICES: Atlanta · Boston · Chicago · Denver · Detroit · Los Angeles · Memphis · Nashville · New Orleans New York • Piqua • Portland • Sali Lake City • St. Paul



Paper bag coated with Du Pont ALATHON* keeps meat fresh longer...cuts packaging costs

Moisture-resistant paper coating of "Alathon" retains flavor and color of meat...bags eliminate return shipping charges

Meat packers used to ship raw meat trimmings to sausage makers in returnable wooden barrels or one-use fiber boxes. But the costs of packing and shipping were high. And the meat sometimes lost color and flavor . . . even became rancid.

Then multi-wall bags, coated on the inside with Du Pont "Alathon" polythene resin, were introduced. These are 75 lb. capacity valve bags that are filled and weighed automatically. They cost less than half the price of one-use fiber boxes...eliminate return shipping costs in the case of barrels... and sausage makers find the bags easier to handle.

The coating of "Alathon" retains

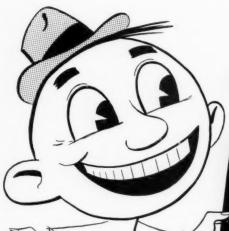
the natural juices of the meat because vapor transmission through it is extremely low. This preserves color and flavor, too. Because "Alathon" is so inert, it doesn't affect the meat (or other food) in any way—remains unaffected itself. And "Alathon" stays flexible under refrigeration . . . protects contents at temperatures as low as -70°F.

Paper coated with Du Pont "Alathon" has other packaging advantages. It is highly resistant to alkalis and acids. Blended with wax, "Alathon" produces a tough glossy coating for bread and other food wraps. "Alathon" can also be formed into many types of closures (screw-on, plug-type, etc.) and flexible bottles for a variety of products.

Investigate the many advantages of "Alathon" for your packaging needs. We will gladly assist you on development work. For further information, write:

E. I. DU PONT DE NEMOURS & Co. (INC.) Polychemicals Dept.—District Offices: 818 Olive Street, St. Louis 1, Missouri 350 Fifth Avenue, New York 1, New York 7 5. Dearborn Street, Chicago 3, Illinois 845 E. 60th Street, Los Angeles 1, Culifornia





Make Your Advertising Jump with

Crocker DAY-GLO Coated Papers!

7oday, advertising has to have action—selling action, that is!

Take your displays—for example. They have three seconds to attract attention, get appraisal and win approval.

Or take packaging. It must reach roving eyes, overwhelm its colorful competition, make shoppers stop and look and buy.

And your direct mail. It has to have enough eye appeal, enough stopping power, to stand out from all the other mailing pieces your prospects get.

What's the answer? All you have to remember is this—Crocker DAY-G LO Coated Papers, because their colors are four times as bright as ordinary colors, will make your labels, packages, inserts, direct mail and displays pack four times the punch!

There's a Crocker DAY-GLO Paper merchant near you. He'll be happy to show you how to make your advertising really jump.

Be Bright-use DAY-GLO®

CROCKER, BURBANK PAPERS

FITCHBURG . MASSACHUSETTS

SWITZER BROTHERS, INC.

4732 ST. CLAIR AVENUE CLEVELAND 3, OHIO



both single and dual controls are products of our complete coordinated PLANNED PACKAGING facilities.

Planned Packaging MOVES MERCHANDISE



e of PLANNED PACKAGING"

CINCINNATI . TOLEDO . MANSREID . CANTON . PITTSBURGH . BINE . NEW YORK . CHICAGO

Take a lesson from this lady...





"Haase's Spanish Olives, imported from Seville, are packed by the A. C. L. Haase Co., St. Louis, Missouri. All three products shown above are sealed with Crown Screw Caps.

SHE didn't go shopping especially for olives... but you can see they made the trip home with her. It only goes to prove once again that if you have a fine product and pay special attention to the package it's going to move off the store shelf.

Haase's Spanish Olives* from Seville are packed in containers with plenty of sales appeal. They're handy, wide mouth "refrigerator" jars...easy to store...easy to get into... and they make a fine re-use jar. And don't overlook that closure...it's a colorfully decorated Crown Screw Cap with the features housewives want...easy opening...tight re-sealing... protection of the original flavor and quality of the product when stored. This closure has the advantages you want, too ... trouble-free application... dependable sealing...specially selected liners.

Before ordering closures again, find out about Crown Closures . . . the caps that more and more packers are using. Crown Cork & Seal Company, Baltimore 3, Maryland. World's Largest Makers of Metal Closures.

CROWN CLOSURES

Approved by millions of housewives

Provenience...

For uniquely original package design, that will add new rates appeal to your product, but have a market product of the control of the control



THE WARNER BROTHERS COMPANY

New York Sales Office: 200 Medison Avenue, New York Lo. N. Y. FOLDING CARTURS - HAND MAY OR MACHINE MADS SETUP BOXES



NASHUA CORPORATION

NASHUA, NEW HAMPSHIRE

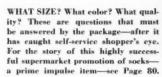
Formerly Nashua Gummed and Coated Paper Company



Many types of products are also packaged in Nashua Printed Polyethylene Bags.

MODERN PACKAGING

Modein packaging





PROTO COURTEST STEVANIA DIV., AMERICAN VISCOSE CORP

Help-yourself textiles

A WHOLE NEW TECHNIQUE OF SOFT-GOODS PACKAGING IS BEING CREATED

BY NEW MERCHANDISING CONCEPTS AND TEMPTING NEW OUTLETS IN SUPERMARKETS

One of the most active of all fields of packaging today is in textiles. Seemingly overnight, the country's second largest industry has become aware of the advantages of individually packaged selling units and the makers of wearing apparel, household linens and other soft goods are rushing to catch up with the kind of packaging so long enjoyed by the producers of foods, drugs, toiletries and others.

The old-fashioned dry-goods store—where there was time for a clerk to take things from behind the counter, show the stock and explain its virtues

-is gone. Today even dry goods must sell themselves and, as always in that kind of selling, the package is a basic necessity (1) to provide the selling unit, (2) to protect the product, (3) to give the essential information that was formerly supplied by the sales person, (4) to establish brand identity and (5) to attract attention to that brand amidst increasing competition.

To all this—which applies to many types of stores—is added the tempting new market offered by the booming trend toward the merchandising of not only food, but practically all household supplies in the supermarkets. The "food" store today is not just a food store; it is the family shopping center. More and more, Mom, Pop and the kids depend on the supermarket as the place where they can buy all of their daily needs under one roof. With the parking lot replacing the hitching post and the package replacing the clerk, it's a throwback to the crossroads general store.

Supermarket operators who have already expanded into cigarettes, drugs, housewares, magazines and cosmetics are now eagerly eyeing, if not actually invading, the textile field. These non-food items offer higher profit margins than the average food item and will help meet the challenge of price-shaving competition, higher taxes and increased overhead.

"Should the supermarkets successfully solve the problem of soft-goods items," said Victor Lebow, marketing consultant in this field at the recent Annual Supermarket Institute in Cleveland, "this business may produce as much as 10% of the gross sales of the individual supermarket. The potential is at least \$2 billion and perhaps as high as \$4 billion a year."

This year's general easing of softgoods markets has been an additional incentive to textile manufacturers to examine more closely the potentials of the package to capture the increased sales that appear to be waiting up new avenues of merchandising.

Across the country, therefore, in the larger and more progressive supermarkets may be seen alongside the shelves of canned soups and breakfast-food cartons new and interesting types of packages containing such things as nylon hosiery, slips, panties, socks, men's briefs, T-shirts, handkerchiefs, diapers, bedroom slippers, kitchen cot-

tons, work gloves, bath mats and all manner of practical soft-goods items.

On the following pages are the stories of eight successful packaged lines in the textile field. Five of these lines have been designed specifically for supermarket selling. One other has been planned admittedly with that possibility in mind. And all are intended to capitalize on the "help yourself" kind of merchandising, whether it be in a department store or supermarket.

New packaging techniques are developing—as specialized as the selection of profitable items to sell in these new markets. The supermarket textile package must be able to sell itself as easily as a can of peas or a box of soap flakes. The package must establish its own brand identity and inspire confidence of quality. It should be noted that, unlike other packaged-product fields, to date there are relatively few well-known brands in the textile field that enjoy wide consumer acceptance through extensive consumer advertising.

In the supermarket the package must do its own promotional job. In these outlets there are not only no sales people, but no facilities for the kind of window, counter and shelf display found in department and specialty stores. By its own forcefulness, the package on the supermarket shelf must not only inspire the sale, but it must quickly reveal all necessary data in regard to size, style, color, etc.—including some functions beyond what the average food package is called upon to perform.

The self-service textile package must be sturdy enough to withstand repeated handling and, above all, it must discourage pilferage. Losses from pilferage can run as high as 20% in nylon hosiery. Unchecked pilferage could soon eat up the profits of merchandise with even the most favorable mark-ups.

The case studies presented on the following pages have been carefully selected to reveal how these problems are being solved by firms which are already successfully launched in the self-service-textiles field. Some are newcomers; others are pioneers in this type of merchandising. A review of what they are doing, we believe, will be helpful to practically every firm that is branching out into—or considering going into—these exciting new fields of selling.

How to make nylons pilferproof



TRANSPARENT TUBE, 22 in. long, sealed at both ends, is impossible to hide in the purse.

A truly revolutionary development in the hosiery field is the pilferproof package developed by R. F. Nylen & Associates, Chicago merchandising firm, for supermarket selling of 60-gauge, 15-denier nylon "Donna Lynn" brand stockings manufactured by Burlington Mills.

The package is a transparent extruded acetate tube 22 in. long and 1 in. in diameter, called the "Stocking Stik," which by its shape is practically impossible for a dishonest customer to conceal.

Yes, packaging-wise it's relatively costly, but not so when it cuts losses from shoplifting of nylons in supers from as high as 20% to almost nothing.

The pilferage problem led to the search for a package that would be impossible for a woman to conceal in her purse before reaching the check-out counter. Many types of bags, wraps and boxes had been tried-even dispensers that rang a gong to notify attendants every time a package was removed. None of these had been completely successful.

With grocery stores becoming one-

stop shopping centers, the supermarket is a logical outlet for nylon hosiery. Hosiery is as essential to women as bread and butter. If they can pick up good-quality, reliable stockings while shopping for food, it saves them going elsewhere to make the purchase. Furthermore, hosiery offers the food-store operator an item with a high profit margin. But it appears that there is something irresistible to any women in the possibility of slipping a small flat package of hosiery into purse or pocket and walking out.

The "Stocking Stiks" are the result of two years' study in more than 2,000 stores in seven metropolitan areas to determine the best methods of handling and serving hosiery through distributors to self-service retail outlets. They are already being sold in supermarkets in some 20 cities throughout the Middle West and South, in northern New Jersey, in Boston and are just being introduced in certain sections of the New York area.

The package consists simply of an extruded tube of transparent acetate, the ends of which are spun so that there can be no damage to the stockings, either when the tubes are filled or when the purchaser removes them. A flat disk of acetate is placed over each end and secured with a shrink-type cellulose band just like those used on bottles. A wrap-around label on the outside of the tube gives brand identity, quality, color and size data. Each tube contains one pair of stockings. The tubes are filled by folding the stockings in half over a strip of ribbon. The ribbon is hooked to a wire that has been passed through the tubing and the stockings are gently

drawn into the container. The cellulose band to close the tubes also prevents pilferage, providing a sealed package from which the stockings cannot be removed without detection.

The packages are fitted into a specially designed 20-in. square wire display dispenser which is 57 in. high and holds 12 doz. tubes, each containing on; pair of two of the most popular hostery shades as well as a complete range of sizes from 8½ to 11.

The stockings are offered to the stores as a complete deal including packages, display racks, merchandising aids and the services of a merchandising director. Meeting with wagon jobbers or wholesalers, the merchandise director assists in sales meetings, trains supervisors, calls on supermarkets and local chains in the area and organizes sales contests.

CNEDITS: Tubes, Extruded Plastics, Inc., Norwalk, Conn., using Tennessee Eastman Co. Tenite I accitate. Cel-O-Seal bands, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. Labels, Printcraft Press, Inc., New York. Display rack, Alpha Displays, Inc., New York.

Hankies for the whole family

A very interesting venture in cellophane packaging of handkerchiefs for supermarket selling has been undertaken by Saddle Rock Sales Co., Flushing, N. Y.

The company first determined that it could offer men's handkerchiefs as a profitable item to supermarket operators. The need for a package was obvious. As the idea grew, a whole family of packages developed out of the original thinking—handkerchiefs packaged for Mr., Mrs., Miss, Jr. and even the very small fry as Jr. Jr.

A special package is thus offered for each member of the family, each identified with a designated color: blue for men's handkerchiefs, pink for women's, green for misses, orange for the junior or cub size and vellow for the "kiddie" size. The packages are flat cellophane bags printed in three colors on the face and left transparent on the back to permit examination of contents-an important feature for showing printed patterns of the handkerchiefs. The dimensions of the bags are approximately 9% by 6% in. and, packaged with a stiffener card, they are reported to be bulky enough to discourage pilferage. The bags are heat sealed

As handkerchiefs had previously been sold generally open for examination, the company wisely made a consumer test to determine whether shoppers would buy them in sealed packages. Women were shown a group of the packaged handkerchiefs and asked which they would buy. They were purposely not asked whether or not they would buy handkerchiefs in a package. Only after they had had the handkerchiefs for a time was a further question asked: "Would you

have preferred to examine the handkerchiefs outside of the package?" Most of those interviewed said that this question had not occurred to them. The patterns and quality of the cloth were so clearly visible through the cellophane that they were perfectly satisfied to take them in the package.

The idea of packaged handkerchiefs for the whole family is novel and, it is felt, will have considerable appeal. It attracted wide attention when exhibited at the recent convention of the Supermarket Institute in Cleveland.

Saddle Rock Sales Co. sees in this package development not only a way to open up new markets for handkerchiefs, but a way to establish brand identity which non-packaged handkerchiefs have lacked.

CREDIT: Bags, Oneida Paper Products, Clifton, N. J.

NOVEL APPEAL is provided by packages for Mom, Pop and kids.



T-shirts for Father

Men's T-shirts and athletic shirts are lending themselves to packaged supermarket selling with a considerable degree of success.

There is comparatively fast consumption and rapid turnover in such items—a fundamental reason behind the entire trend to supermarket sale of non-food items. When the shopper can pick up such items readily in the supermarket, it saves a stop with a possible parking problem elsewhere.

Items of male attire such as socks and athletic shirts are usually purchased by the woman of the family anyhow and when she sees them on packaged display in the supermarket, she can pick up many unplanned as well as planned purchases.

Furthermore, men are becoming shoppers in supers and thus have a greater influence on purchasing than heretofore.

A recent market survey by BBDO advertising agency showed that 68% of the husbands are now shopping for groceries at least once a week and sometimes more often. More than half



COMPLETE VISIBILITY of the unprinted cellophane package permits customer examination and saves costs. Packaged men's underwear has been one of the most successful self-selling textile items for the supers.

of them shop on the big weekly "stockup" trip and it was recorded that they often buy things the woman of the family didn't intend to buy. Wandering around while the women are getting meats and vegetables, the men are apt to pick up many impulse items if they are presented in easy-tobuy packages.

Transparent-film packaging provides the way to present a multiple-sale unit of, say, three shirts at an attractive price which still offers the self-service store operator an attractive profit. At the same time, the package simplifies inventory, protects the product from shopwear and permits self-service selling from today's well-arranged display racks.

As such merchandise is in itself

bulky, there is not the problem of pilferage that is true of a great number of smaller soft-goods items.

A typical example is the line of men's underwear packaged by West Knitting Corp. of Wadesboro, N. C. This firm uses clear, transparent, unprinted cellophane bags which permit full visibility of the merchandise. The use of the same size of package for the complete line is economical. Brand and product name, as well as all other essential selling information, appear on colorfully printed saddle labels which are stapled to the bags.

CREDITS: Bags, Package Products Co., Charlotte, N. C., using DuPont and Sylvania cellophane. Saddle labels, Herald Press, Inc., Charlotte, N. C.

Sock selling in supermarkets

A 1½-ft.-wide wire rack four shelves high filled with packaged men's, women's and children's socks, placed near check-out counters in a supermarket, has been found to produce from \$20 to \$30 in sales per day. For many food items, it takes several times that amount of selling space to produce the same amount of dollar volume per day. Representing somewhere in the neighborhood of a 30% mark-up,

TWO SUCCESSFUL PACKAGES for supermarket socks. Printed cellophane bag (right) is sold from wire rack shown on Page 77. Plain cellophane bag with saddle label gives full visibility. Both use inner paperboard stiffeners.



the socks are also a high-profit item in comparison with foods, where the profit margin may be only a few cents.

These profitable aspects have induced a number of the large supermarkets to introduce packaged socks as an impulse item among their increasing number of non-food items.

One of the pioneers in this field is the Grand Union Co., East Paterson, N. J. Starting the merchandising of packaged socks in a few test stores last December, the company reports that it is selling these items in more than a hundred of its stores today.

The socks, all of which are cellophane packaged, are supplied principally by two firms: Superbilt Products Co., a division of Rudin & Roth, New York, and the Hosiery Guild, New York, a subsidiary of Triad Hosiery Corp., set up last year to handle supermarket sales. Both firms report that they have already sold well over 1,000 supermarket outlets each.

Although the two suppliers are packaging units of three and four pairs of the socks in cellophane bags to sell at the attractive price of 99 cents and \$1.19 each, their packaging differs slightly.

Both types are meeting with wide favor in Grand Union and elsewhere because, in spite of their differences in construction, both apparently meet the basic requirements of supermarket selling:

 Simplified units with contents planned for universal consumer appeal.

2. Attractive appearance that com-

pares favorably with design devices used to give appetite appeal to fcod packages.

3. Convenient packages that can be displayed in a minimum of space, that are sturdy to handle, that give all essential data at a glance.

4. Quality appeal to inspire shopper confidence by emphasizing a wear guarantee—a very important factor in building good reputation for soft goods sold in supers.

In effect, the packaging is so complete in its selling aspects that the grocer doesn't have to worry any more about his sock section than about his canned soups or cereals.

Superbilt Products Co. is using colorfully printed cellophane bags, the design and color scheme varying with each type of sock offered-men's, women's and children's. The bags are of single back-seam type, printed so that they may be filled by the use of a paperboard stiffener around which the socks are folded inside the package. The stiffener is also printed with the warranty: "Guaranteed for four months wear or four new pairs free." The packages are stacked in the wire racks with the sealed end at the bottom of the package (see photo p. 77). This, it is reported, has been found to give better visibility and a neater appearance to the products.

The Hosiery Guild is packaging all its varieties of socks for supermarket selling in clear, unprinted cellophane envelopes, using stapled paper labels for printing brand and trade-name identifications. This is done to give

full view of the merchandise in the package so that colors, argyle designs, etc., are clearly visible. It also is economical in that the same unprinted bags can be used for all types of socks, thereby eliminating entirely the need for package changes and possible waste of printed cellophane if demand is greater for one variety than another. These packages also are given rigidity for display purposes and for handling

by the use of paperboard stiffeners.

CREDITS: Cellophane for both packages, Sylvania Div., American Viscose Corp., 1617 Pennsylvania Blvd., Philadelphia 3, Pa. Printed bags, Lassiter Corp., Charlotte, N. C., and Oneida Paper Products, Clifton, N. J. Plain cellophane bags, Aladdin Products Co., 158 W. 18th St., New York. Saddle labels, Hy-Grade Printing & Stationery Co., 121 Varick St., New York.

cellophane to allow for the necessary rate of expansion and contraction in moisture content of the merchandise and thereby provide a sturdy unit to withstand rough handling. The bags are one-color printed, leaving broad transparent areas to give visibility of the product. The packages are left unsealed so that the shopper may pull the sweater out and examine it more closely. The company is, however, experimenting with selling from open samples on the counter, with the idea of eventually supplying the packages sealed with cellulose tape.

The packages are filled by the use of a foot-levered tray into which the folded sweaters are placed. The aluminum trays have flexible sides which permit the sweaters to be guided easily into the bags.

CREDITS: Bags, Package Craft, Inc., 202 E. 44th St., New York, using Sylvania and DuPont cellophane.

Sweaters by the bag



TRANSPARENT PACKAGES protect delicate colored sweaters; cut overhead by reducing shopwear. Department stores now demand these handy sales units.

The idea of individually packaging sweaters is not new. Many firms were beginning to offer sweaters—particularly delicate pastel shades—in transparent packages at the beginning of the war. The material situation, however, was such that much of this progress had to be abandoned. Only now have leading firms been able to adopt packaging methods generally.

The interest in packaging arose for two principal reasons: (1) protection of merchandise from handling to eliminate damage and returns and (2) to provide convenient self-selling units in the absence of clerk service to help cut down overhead.

A firm that has had considerable experience in packaging sweaters for department-store selling is the Irwill Knitwear Corp., New York, producer of Jane Irwill sweaters. Each year a larger portion of this company's distribution is individually packaged. Its leading supplier of cellophane pack-

ages estimates its purchase of packaging supplies have increased 50% within the last year or two.

In this case the company is not aiming at supermarkets, but at the type of self-help selling which prevails in department stores and even specialty shops today.

Irwill is now using bags of 450 MST

Cottons for the kitchen

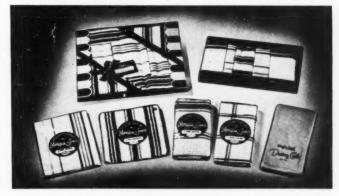
Pioneers in the packaging of soft goods for supermarkets are the makers of kitchen cottons—dish towels, dish cloths, pot holders and dusting cloths.

One of the leaders in this field, Morgan-Jones, Inc., New York, began cellophane wrappings of such products in units for self-service selling in grocery stores as early as 15 years ago. Today it is producing packaged units by the millions for selling in practically all national and regional chains.

It was apparent many years ago that grocery stores were a logical outlet for kitchen cottons sold as related items with all types of household cleaning products. If the housewife bought the latter in the grocery store, it was obvious that she would purchase the necessary items for applying them in the same place. Grocery-store operators were immediately receptive to the idea, as kitchen cottons offered an average mark-up of 33%.

Cellophane was an efficient packag-

KITCHEN COTTONS have been sold in packages in supermarkets for 15 years. Morgan-Jones, Inc., cellophane wraps its standard and gift lines.



ing medium to give visibility to the product and to provide convenient self-service selling units. Today's wraps for standard lines in this field do not look much different from those adopted in the beginning, but great strides have been made in high-speed mechanical methods of folding the merchandise and wrapping it. The packaging has also permitted the maker to develop wide acceptability for brand names.

Morgan-Jones has fully automatic production for folding and wrapping dish towels, dish cloths and dusting cloths turned out at very high speed. This company uses clear cellophane and provides quickly recognizable brand identity by the use of a one-color-printed green label inserted in the package and showing through the cellophane.

The new, stepped-up phase of textile selling in supers is reflected in the fact that this company recently has introduced two packages with gift appeal. These include assortments of kitchen cottons packaged in colorful, cellophane-wrapped U-boards. These packages have been very successful in encouraging sales of the products which the user picks up for bridge prizes, for showers and for other gift occasions.

One of these packages has a U-board printed in red with white polka dots and contains one dish towel, two dish cloths and one pot holder overwrapped with clear cellophane. The other larger package with three dish towels, two dish cloths and two pot holders has the U-board printed to give the effect of a gay awning stripe in red and beige and is overwrapped with printed cellophane to display brand name and contents on the face of the package.

The space on the back of both packages has been used effectively not only to promote brand name, but to further the company's reputation for the controlled quality that is so important in the merchandising of all packaged soft-goods items for self-service selling.

Copy appearing on one of the packages reads:

"The gay cottons snugly fitted into this package will add cheer to your kitchen—coming to you from a company which has been manufacturing cotton for three-quarters of a century. They're made for your working pleasure by Morgan-Jones—the same famous company that gives you those handsome scatter rugs, bath sets and bed-spreads.

"Real quality prevails in all Morgan-Jones products, because they're the result of careful handling from raw cotton to finished product. Imaginative and expert designing, too, makes each household article carrying the Morgan-Jones labels something "special."

"Look for this popular Morgan-Jones trademark in fine stores from coast to coast."

Many makers of soft-goods items contemplating the supermarket field will find that valuable lessons can be learned in a study of the packaging done by this successful merchandiser of kitchen cottons.

CREDITS: Cellophane wraps, Package Products Co., Charlotte, N. C. Labels and U-boards, Herald Press, Inc., Charlotte, N. C.

Diapers-the first necessity

Three new packages for Springs Mills gauze diapers are interesting examples of varied package designs tailored to meet selling requirements in different types of retail outlets.

Springs Mills is the distributor of household textiles under the widely advertised brand name "Springmaid." During the past year the company added gauze diapers to its line and, of course, found it greatly to its advantage to tie in the diapers with the Springmaid name.

All three packages are folding cartons of the same construction, designed to hold a dozen diapers. One, however, has been designed exclusively for department-store selling. The main object in this case was to provide a package with appealing color and distinctive treatment that would stand out in counter display and emphasize the Springmaid name. This has been done by boldly printing the brand name in black on a polka-dotted aquabackground and centering the trade-

mark between the two words of the product name, "gauze diapers," in a quickly recognizable symbol of threcubes accented with magenta for added color interest.

Believing that there is a market for diapers in supermarkets, the company is offering a completely different package for these outlets, but still emphasizing its Springmaid trademark strongly. A bolder design using red and marine blue with white has been selected to provide the kind of design



PACKAGE approaches for three types of markets are illustrated by Springs Mills gauze diaper cartons—left to right: pleasing design for department stores; bolder technique for supermarkets; special treatment to meet requirements of markets not covered by the other two packages.

that will stand out in the food store in competition with the splashy effects achieved for grocery packages. A third package (for a lighter-weight gauze) has been developed to meet price requirements in special markets. In this case the product is presented under the name, "The Springs Cotton Mills Gauze Diapers." The package is printed in two colors-a shade of aqua darker than the department-store package, combined with a dark red, with strong contrasts provided by the lettering of the trade and product name against a ribbon-like motif which is left white. A line drawing of the mill gives pictorial interest.

ves pictorial interest.

The idea of selling diapers in super-

markets is another example of changing trends in merchandising. Today's modern supermarkets are more and more being located in new residential areas where there are bound to be young married people with growing families.

It is reasoned in the trade that diapers for the first baby will most always be bought in the department store at the time the mother-to-be is buying a layette. However, diapers wear out and it is logical reasoning that if a young mother needs replacements she will be more than likely to pick them up as an unplanned purchase in a neighborhood shopping center if convenient packages are

placed on display within easy reach.

When the second and third babies arrive, there will definitely be a need for further diaper requirements—even if many of the other layette accessories bought for the first child can be re-used for the next one. This is an additional reason why diapers can become a good turnover item in the local market.

CREDIT: Cartons, Old Dominion Box Co., Inc., Lynchburg, Va.

Ready-to-sew dress in a bag

Just as life in the kitchen has been made easier in this modern age by the use of prepared food mixes which can quickly be made into a cake or a pie, homemakers fashion requirements are now being simplified by the use of impulse-purchase packages containing ready-to-sew dresses.

This clever packaging idea is a development of Stylecraft Frocks, Inc., Philadelphia, Pa., which has just put on the market its Sew-Easy Dress Kit. In a Sew-Easy package are all the makings of a smartly fashioned dress, including trimmings and accessories. Women, who have been taking to sewing with renewed enthusiasm lately, can make a frock from a package in an hour, according to the promotion copy.

The heat-sealed bags are of an 8-by-12-in. size, reported to be popular with retailers, and, as the company's copy reads, "Anyone who can thread a needle will be put in a mood for sewing by the wrapper design."

The package contents are completely explained in black-and-white lettering on a coral background—a color selected to accent a wide variety of dress materials. An outline illustration of a spool and zig-zagged edges of the printed design simulating cutting with a pinking shears provide appropriate design symbols for a dressmaking item.

The unprinted areas of the bag permit the shopper to see the pre-cut and professionally finished material through the cellophane and also an illustration of the dress style printed with detail as to size, type of fabric, etc., on a paper insert contained in the bag. The



CONTENTS ARE EXPLAINED on printed cellophane bag. Unprinted areas reveal paper inserts showing styles, sizes and directions for sewing, as well as fabric, buttons, trimmings. At right is a finished dress.

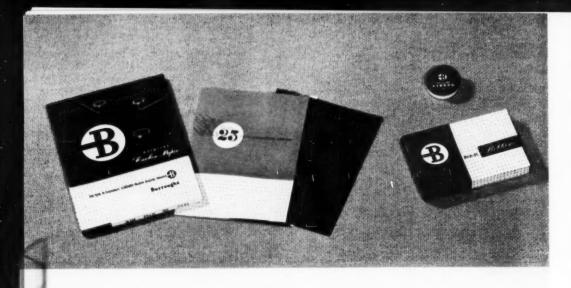
clear cellophane back of the package permits further examination of the contents and reveals another insert printed with detailed illustrated directions for sewing the dress together.

Buttons, zippers, shoulder pads and other separate sewing aids are held within the package without risk of loss in shipping or handling. Each dress is ready-cut with such professional details as fine tucks, embroidery on pockets and scalloping, depending on the style selected. The home seamstress need only sew the side seams, insert zipper, finish sleeves and hems.

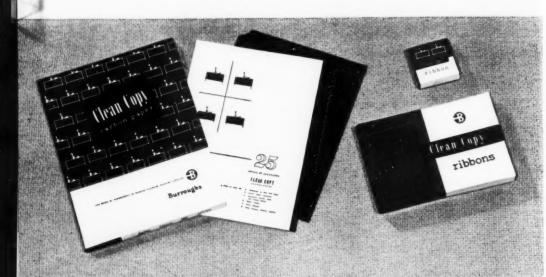
Stylecraft calls it "high fashion with a tiny price tag," the prices ranging from \$4.95 to \$8.95. The initial offerings include a choice of 33 styles in juniors, misses, women's and half-size dresses and in fabrics by famous manufacturers: Bur-Mil rayons, Dan River cottons, Soap-n'-Water cloth, et al.

The packages permit many counterdisplay possibilities in colorful, eyeappealing arrangements with varied interest provided by the insert illustrations showing different styles. John Wanamaker, Philadelphia, was first to introduce the new packages, with exclusive distribution in that city. The packaged Sew-Easy Dress Kits obviously have many possibilities not only for department stores, but for other outlets.

CREDIT: Printed cellophane packages, Milprint, Inc., Milwaukee I, Wis.







-B line

for Burroughs

PACKAGE DESIGN IS THE IMPLEMENT
FOR AN ORDERLY REFORMATION OF
BUSINESS-MACHINES SUPPLY LINES
UNDER A QUALITY STANDARD

These packages never battle for customers' attention on dealers'

They do not help sell merchants on the idea of adding a new line of goods to their sales stock.

But, to the Burroughs Adding Machine Co., Detroit, whose line of business-machine supplies the packages enclose, they represent the realization of a marketing opportunity.

Burroughs' main products are business machines. The machines range from small adding machines to complete accounting mechanisms and are sold in the U.S. through 140 company-owned branches by a sales staff of 1,500. Once the machines are in customers' offices, a staff of company-trained servicemen provides efficient mechanical service to all users. A large proportion of all users' machines are maintained by Burroughs under service-agreement contracts.

Efficiency of the machines depends to a considerable extent on the accessory supplies used with themon the carbon paper, inked ribbons, roll papers and other such items. So the Burroughs servicemen offer these supplies items as a part of their regular service to customers. It was quite natural that, under this sales situation, the supplies packages would get secondary attention.

But a customer survey, in 1948, showed the need for better supplies packaging. Customers needed adequate package identifications, especially during inventory time and when re-ordering. They resented faulty packaging and cartoning that caused their goods to be delivered in less-than-perfect condition. They showed definite reactions to different package designs, shapes, opening devices, instructions for product use, identification panels.

So Burroughs began a program with these three aims:

1. To develop the supplies to a point of definite superiority in the field and broaden the line so that customers could get the improved supplies for all their business machines—not just those made by Burroughs.

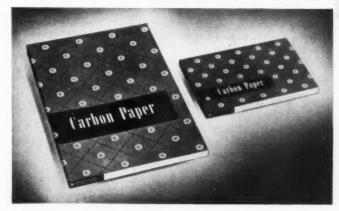
2. To package the supplies in such attractive and convenient form that they would not only imply the quality of the goods inside, but would also have positive carry-over effect on users' opinions of Burroughs machines, the Burroughs company and the Burroughs sales and service men.

To make the re-order forms and sales literature going into packages of such "class" that-besides helping sell more supplies—they would actually become, like the packages themselves, one of the company's best forms of institutional advertising.

To begin with, Burroughs had no packaging department per se. The program was handed to the advertising department, with directions to secure cooperation from the service division, the purchasing division and the other sections of the company when needed. One of the first steps taken by the advertising department was to engage the packaging section of a Detroit industrial design firm as a source of experienced judgment and creative talent. Under this system the packaging program itself was attacked.

The great complexity of the job is evident from even a partial list of the goods to be packaged: sheet carbon paper in three grades, with three standard sizes and dozens of odd sizes within each grade; carbon paper assemblies, including sewed binders and pasted jackets for all uses; inked ribbons in three grades and in the many sizes necessary for all typewriters, adding, accounting and other

ANOTHER DESIGN is used for off-sizes of carbon paper, but the repeat pattern of the "B" trademark still identifies product as Burroughs'.



THREE GRADES of Burroughs' typists' supplies are denoted by distinctive designs and colorsyet each is unmistakably Burroughs. Bellaire line (center) is top grade; Mainline (above), second grade; Clean Copy, the economy grade. The Clean Copy carbon paper package was recently judged the best set-up box in the office-equipment field. COLOR PLATES COURTESY BURROUGHS ADDING MACHINE CO.



LINE INCLUDES dozens of machine accessories, packaged under Mainline theme. New Burroughs packages won awards in both set-up and folding box contests for artistic design and general superiority in their field.

machines; plain and carbonized roll paper for adding and accounting machines; autographic register rolls; liquid platen restorer; protective machine hoods; journal sheets of all sizes; spirit duplicator fluid; base-offelt machine pads.

The packages would be big, little, middle-sized. They would be flat, round, square, rectangular. Products would be in bottles, tins, boxes and wraps. There were problems of manufacture, storage, shipping, stocking, intra-office handling, supply-exhausting.

The project began with the problem of packaging the carbon papers and typewriter ribbons, where there were three different grades to merchandise. The obvious solution, package-wise, was to choose three brand names and design packages under each brand name. The brand names and designs had to carry the burden of visibly showing the differences in product quality, but it was imperative that packages for all three grades "hold together" as a family.

The three names "Bellaire," "Mainline" and "Clean Copy" were chosen for the three grades of merchandise.

The Bellaire packages would be done in simple, feminine good taste with cost being secondary to the job of connoting superior quality. This quality impression must be so outstanding that the line would be the natural choice of executive secretaries and others whose writing or recording jobs are especially demanding.

The Mainline carbon and ribbon packages had to be unmistakably "Burroughs." They had to be outstanding, yet not rival Bellaire in richness of appearance. Principal feature of this design turned out to be

the big red Burroughs trademark, a stylized "B" which immediately catches the eye, combined with the illustration of a machine key and stem that carries the eye unswervingly to the product name.

The Clean Copy packages had to denote economy-grade goods, yet still carry the feeling of traditional Burroughs quality and keep the family resemblance.

Going further into the packaging of the standard-sized sheet carbon, more than the 100-sheet box had to be considered for each of the three brands. The carbon paper in each box was to be divided into 25-sheet lots and each 25 sheets held in a separate protective folder. And, incidentally, variations of the box and folder designs were to be imprinted in complementary colors on the backs of the carbon sheets to provide identification of grades and maker on each sheet.

In addition to the standard-sized carbons, there were special sizes varying from 3 by 8 in. up to 18 by 24 in. And, from the volume standpoint, the special sizes were almost as important to Burroughs as the standard sizes. But the odd sizes posed still more peculiar problems in packaging design. The main trouble was the great variation in size, which made it impractical to print separate paste-around wraps for each box. The solution was found in-literally-a "wallpaper" design wrap. This could be cut to any size without losing the design effect.

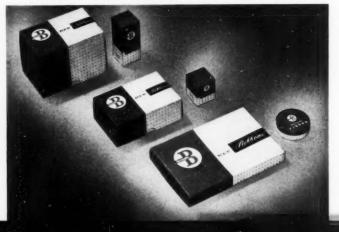
For the three brands of typewriter ribbons, the packaging problem was to incorporate the three brand designs into one-ribbon containers and six-ribbon cartons. Each ribbon would also be wrapped in heat-sealed cellophane imprinted with appropriate design work.

For the items other than flat-sheet carbons and typewriter ribbons, where there was only one grade to be sold, the design problem simplified itself. It was decided to utilize the basic elements and color scheme of the Mainline carbon and ribbon packages, but, of course, without the Mainline brand name.

Thus, the packaging-design project can be visualized as being done according to a "T" plan, with the Belaire and Clean Copy carbon and ribbon packages forming the two arms and the Mainline carbon and ribbon packages, together with the packages in the Mainline theme for miscellaneous items, forming the vertical stem of the "T."

Typical of the customer convenience ideas incorporated in the packaging is one seen in the new label for carbonized roll paper. Perhaps for the first time, this label will prevent the spoiling of several feet of paper

MANY SIZES and shapes of boxes are required for line of ribbons. Unit packages are either metal or paperboard, all with same design theme.



when a new roll is opened. No sharp edge is needed to open these rolls. A simple device, the label functions much like the tear-tape opener on cigarette packages.

Since a large proportion of Burroughs supplies is delivered by mail directly to the customer, inexpensive but thoroughly protective mailing cartons were devised and purchased. One mailing carton being used is a patented cushioned paper bag. These bags protect the display cartons being shipped in them-especially the vulnerable corners. Thus, not only the products themselves, but the packages, too, reach the user in perfect shape, having lost none of their eye appeal or usefulness.

An integral part of the packaging program, to Burroughs' way of thinking, is the placing of re-order cards and other promotional material in the packages. In these matters Burroughs went somewhat farther than is customary. The re-order card in the carbon boxes is typical. When the user comes to this order card in her carbon box, she sees a perky, red bird perched on a typewriter carriage stuttering out the reminder, "It's ti-titime to re-order!" The tear-off card attached is an easy-to-follow, selfmailing order card. The illustration on

the card is changed every few months so that the typical carbon user always gets a new, humorous reminder. Indicative of the success of these re-order cards is the fact that the girls in many customers' offices have begun displaying the little illustrations on their desks.

Also in every package is a folder 'selling" some product other than that being used. So the over-all impact of every Burroughs supplies package includes not only the package itself, but every other possible means of selling Burroughs supplies and the Burroughs company.

Some measure of the excellence of the new designs was reflected in this year's competitions of both the Folding Paper Box Assn. of America and the National Paper Box Mfrs. Assn. In both competitions Burroughs containers earned awards. In the latter competition, the set-up box for Clean Copy carbon paper was judged the best package in the office-equipment field. In both the set-up and foldingbox competitions, the Burroughs packages received honorable mentions from the standpoint of artistic design and the folding-box judges gave the line an honorable mention in the miscellaneous class for general superiority according to end use.

Results of the packaging program are being felt throughout the Burroughs organization. The program has engendered a tremendous new consciousness of the marketing possibilities in Burroughs' accessory supplies. And not only have the servicemen taken a new grasp on the supplies sales opportunities, but also the Burroughs sales representatives are giving selling time to supplies during the installation of every new machine.

While the visible benefits of the new packaging are even greater than were foreseen, Burroughs believes customer reaction indicates that the new packaging is doing a big job of helping keep customers sold on the desirability of all Burroughs products

and services.

CREDITS: Design program, W. B. Ford Design Corp., 1712 Guardian Bldg., Detroit 26. Box wraps, Rodgers, Kellogg, Stillson, 207 W. 25 St., New York 1. Set-up boxes, Van Ness Bros., Inc., 104-201 Gray St., Paterson 3, N.J. Folding boxes, Robert Gair Co., Inc., 155 E. 44 St., New York 17, and Paper Package Co., 1036 N. Capitol Ave., Indianapolis 6. Bellaire ribbon tins, J. L. Clark Mfg. Co., 923 23rd Ave., Rockford, Ill. Mainline ribbon tins, Bernardin Bottle Cap Co., Evansville, Ind. "Jiffy" cushioned mailing bags, Jiffy Mfg. Co., Hillside,

The swan bows to appetite appeal

Two years ago General Foods intro-duced full-color cake illustrations to liven up the front panel of its Swans Down Cake Flour packages. Since that time, increased purchases of the flour have indicated the picture idea to be such an effective one that the company has decided to make the illustrations even more dominant.

The new Swans Down packages now on the market feature still further enlarged cake illustrations, while the well-known "swan" trademark has been reduced in size and placed in the upper right-hand corner.

The revised packages illustrate either white cake, devil's food cake or "Happy Day" cake on the front.

Smaller illustrations of all three cakes appear on the back panels with complete recipes for making the cakes. One side panel offers a recipe for angel-food cake and the other carries four frosting recipes. A large white price patch is provided on the top of each of the new packages for the con-

venience of the retailer. This space stands out against the red background.

The Swans Down packages are packed 12 to the case, with every case containing all three package variations.

CREDIT: Wrap, Keller-Crescent Co., Evansville, Ind.



ENLARGED full-color cake illustrations feature the new Swans Down Cake Flour packages.

Packaging's Hall of Fame

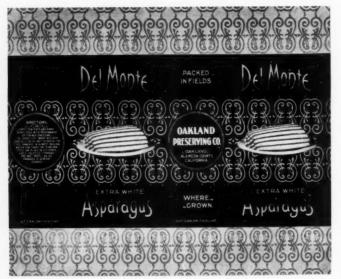


Del:Monte

FORTY-SECOND OF A SERIES



ORIGINAL 1895 label pictured hotel from which brand took its name.



1900 change introduced a green background and a picture of the product. The same design motif used on the label appears on tuck-under ends of wrap.

1909 marked the debut of Del Monte shield, which remains little changed.



Nomination of this month's Packagaging's Hall of Fame entry could be seconded by almost any food buyer anywhere in the world. Distribution of the famed Del Monte brand of canned foods is truly global. Since its big-time debut in 1917-when Del Monte entered the Saturday Evening Post with the first national advertising of any canned fruit-billions of packages bearing the familiar redand-gold shield and dark green background have rolled from its maker's production lines to the store shelves and dinner tables of two hemispheres.

Today Del Monte's producer-California Packing Corporation, with headquarters in San Francisco-is the largest processor of fruits and vegetables in the world. In pineapple it is second only to Dole. In dried fruits its output is exceeded only by Rosenberg Bros. Through its subsidiary, Alaska Packers Assn., Calpak is a principal factor in the red-salmon industry. Moreover, it conducts widespread operations in fruit and vegetable juices, processed tomato products, preserves and pickles. All are planted, grown, caught and selected to meet quality standards set for Calpak's major brand, Del Monte. Now identifying more than 100 items, this brand brings in the lion's share of Calpak's annual sales, which in 1950 reached a record total of \$222,875,150.

Meeting the demand for Del Monte products has made Calpak's production almost as global as its distribution. From its beginnings in California it has expanded to operations in 11 states and the territory of Hawaii, with subsidiaries in the Philippines and Alaska. Its payroll, reflecting the task of packing a hundred-odd items, each at the peak of ripeness and flavor, swells from an everyday 6,000 people to more than 40,000

MODERN PACKAGING

NOMINATED FOR PACKAGING'S HALL OF FAME BECAUSE:

- Through packaging it has spread the bounty of California foods throughout the land and become the world's biggest canner of fruits and vegetables.
- Its development of better packaging materials and methods has aided the entire canning industry.
- A pioneer in descriptive labeling, it has achieved unusual design continuity and trademark recognition.
- Its constant promotion of quality helped win general acceptance of canned foods and early fostered the national habit of brand buying.

at the peak of the operating season. While footsteps of maintenance workers echo through the winter silence of its Minnesota corn and pea canneries, citrus fruits and spinach are being processed at Florida and Texas plants.

Since 1917 Del Monte has been the largest-selling brand of canned and glassed fruits and vegetables in the world. With its heavy stress on quality, it may be credited with having much to do with establishing public confidence in this type of food and in more than doubling U.S. consumption of canned fruits, vegetables and juices. The Del Monte package has played an important part in this growth. The long-range campaign featuring it, which began in the Post and spread to other major magazines. eventually brought a new habit of brand buying to food shoppers and helped to build a broader, more stable market for all California canned goods. Meeting such demand led in turn to improvements in packaging machines and materials and to a wealthier, healthier nation with a more varied and vitamin-enriched diet, freed from ancient seasonal privations and shortages. In terms of rags to riches," however, Del Monte's is no Horatio Alger story. Before the merchandising and packaging miracle could occur, some expensive props had to be on hand.

The background

During the latter part of the 19th century, California began changing from a vast granary to a panorama of relatively small, carefully cultivated fruit and vegetable farms. It was then that its canneries started: crude, noisy sheds where most operations, including the soldering of can seams, were often done by hand.

Calpak, in fact, can trace its lineage back through various corporate marriages to the state's first commercial packers, Dawson and Cutting.

These early canneries were so small that they were forced to concentrate on production which could be sold quickly to jobbers and wholesalers. The jobbers, in turn, handled distribution to individual grocers

throughout the nation, who bought an estimated year's supply and sold it under their own trade names. A private brand which won favor in one area, therefore, might be totally unknown in other regions. This marketing method had other drawbacks: no nationwide continuity of demand, no stable basis for estimating consumption or demand and little or no uni-

TODAY'S FAMILY of Del Monte products includes more than 100 food items—some in tin, some in glass. All the products are packaged with the utmost care to reflect and protect the brand's quality reputation.





1917 brought national distribution and the basic design is still used.



1936 design climaxed a \$100,000 program that brought the first fully descriptive copy on the back panel and a direct-color reproduction of the product.



CURRENT label is considered a masterpiece of product reproduction and a model of descriptive information. The careful attention that has been given to both color and detail on all labels gives Del Monte products a quality look.

formity in the quality of the packed product.

Among the canners then operating was the Oakland Preserving Co., organized about 1885. One of its principal customers was the Hotel Del Monte at Carmel, Calif.

Owned and operated by the Southern Pacific Railroad as a tourist attraction (much as the rival Union Pacific today promotes Sun Valley in Idaho), the Hotel Del Monte maintained high standards of cuisine. Both publicly and privately, it proclaimed its desire for only the best in foods, whether fresh or canned. In serving this customer, the Oakland Preserv-

ing Co. had to prepare its wares under rigid specifications established by the hotel. This special part of the company's pack was therefore distinguished, both as to grade and destination, by simply stamping "Del Monte" on each can and case. Thus, from the start, the name "Del Monte" on canned foods was closely associated with quality products.

The label is born

Growth of business, particularly from wholesale grocers, forced the firm to acquire a range of formal fruit and vegetable labels. The first Del Monte label was designed in 1895. Created by Harry Blachley of the Dickman-Jones Lithograph Co., San Francisco, its principal feature was a bird's-eye-view sketch of the hotel.

The Del Monte label was born into what was then a brawling industry. Competition was rough and ruthless between the small canners. Under such circumstances it was logical for different groups to join forces for mutual protection. The first important merger came in 1899 when almost half of the state's canneries joined together as the California Fruit Canners Assn., a stock corporation. Among the organizers was the Oakland Preserving Co. In ensuing months, C.F.C.A., as the new group was called, gathered momentum and four more canner members. During this period the Del Monte label-now carrying both its original company name and the association seal-underwent its first redesign.

Missing on the new label was the view of the hotel. Gained was a grayish-green background-predecessor of today's dark green-and a hand-drawn vignette of the product. Brand and product name appeared in reverse white, tinged slightly with red. Also in white was an intricate scroll-work overlay carried completely around the label. Other features were extensions which folded to cover the top and bottom of the can, directions for serving the product and, sadly enough, a phrase "Empty Contents of Can As Soon As Opened," indicating that the packer then shared with the public the mistaken belief that there was something deleterious about cans.

Despite its size, C.F.C.A. could not be called a "national" firm so far as distribution goes. Its success, however, did prompt the organization of a smaller competing group called Central California Canneries. Sales for this new firm were handled by the J. K. Armsby Co., a well-known commission house. Formation of the triple-C added a second major force to the California canning scene. Neither, in the opinion of George N. Armsby, was big enough.

Year-around demand, George Armsby believed, was needed to stabilize the canning industry. At the same time, tremendous volume would be necessary to meet such demand. Both of these could be provided, he told canners, by a merger of the C.C.C., the C.F.C.A., the Armsby

^{*}Since absorbed by Schmidt Lithograph Co.

commission firm and the dried-fruit business of Griffin & Skelly.

Consumers, meanwhile, were becoming better acquainted with the Del Monte label, though still on a limited regional basis. In 1909 the label underwent another redesign. The shield appeared for the first time. This also marked the debut of Old English lettering for the brand name, a styling it retains today. Gone was any mention of the Oakland Preserving Co. In its place was the griffon trademark of C.F.C.A., also repeated on the top and bottom extensions.

Public acceptance of the brand kept growing, slowly but steadily. Between 1910 and 1915 a number of changes were made in the label design, all aimed more or less at simplification and possibly at economy. End wraps—which formerly obscured the can ends and required both more paper and folding labor—were eliminated. The green background of the label became darker and, for the first time, the phrase "Reg. U.S. Pat. Off." appeared over the Del Monte shield.

During these years George Armsby had not forgotten his idea. The canners, though not yet enthusiastic, were not quite so aloof as before. Finally, in 1916, the California Packing Corp. was formed. Its first president was George's brother, J. K. Armsby, Jr. He headed a firm that was big from the start, operating 61 plants, including canneries in Washington, Oregon and Idaho, and own-

ing almost three-fourths of the stock in Alaska Packers. Not given any dollar value on the books of the infant corporation was one of its biggest assets—the Del Monte label, in which it has by now invested many millions of advertising dollars.

The big push

Of the myriad canned foods on the market at Calpak's birth, no one brand was produced in large enough volume for nationwide merchandising. This had been one of George Armsby's most persuasive arguments. Merger, he pointed out, would let four companies which were to form Calpak pick out one label as the main house brand, control its pack for uniform quality and market it on a nationwide scale. Commonplace as this may seem now, it was a flash of genius then.

Which label, asked Calpak's founding fathers, should it be? Each was proud of the ones he'd brought into the merger. Finally, Del Monte was selected, largely because it had an edge on any of the others in both sales and distribution.

In preparation for its national debut, design of the label was simplified still further. The distracting scrollwork was removed and the shield made more distinct and less ornate. Lettering of the name was made easier to read, while still retaining its Old English character. Panels, which formerly carried the

product identification, were eliminated. Instead, this information now appeared in reverse white lettering. Each label now boosted the rest of the line, too, by text on the side listing other Del Monte items and urging the shopper to ask grocers for them. This basic design has remained largely the same since then, with two exceptions which will be mentioned later.

Two problems faced Calpak, as the new concern was known. First, they had to acquaint the trade with the brand name Del Monte and the prestige of the firm behind it. Second, they had to impress the Del Monte name on the minds of housewives everywhere as a symbol of dependable quality. When the time came, Calpak went at the job in a characteristically thorough manner. Kick-off in its play for national distribution came with full-page advertisement in the Saturday Evening Post for April 21, 1917. Featuring the now familiar DM shield, plus a smaller view of the shield on the can, this ad stated simply:

"California's finest canned fruits and vegetables are packed under the Del Monte brand." Only other text was the name and address of the packer.

The Post series, planned to increase dealer acceptance, continued for some 10 years. Basically, however, Del Monte carried its message to consumers through consistent

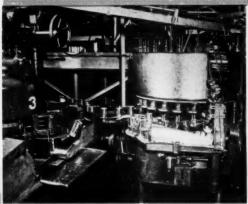
MASS DISPLAYS like this are the result of Del Monte's excellent retailer relationships, which are backed up by powerful national advertising and point-of-sale display material.



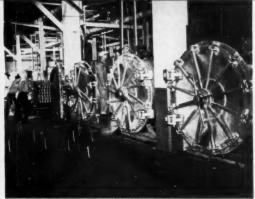
PROMOTION is novel, always with a Western flavor. Chuck wagons like this appeared all over the nation last year for Del Monte's Fall Round-Up promotion.



High-speed packaging operations.



600 A MINUTE is speed of many Del Monte's filling and sealing lines today. Here cans arrive by overhead conveyor, are filled in machine at right, sealed at left and whirled on to next step with split-second precision.



BATTERY OF RETORTS which cook and sterilize canned goods prior to labeling. Del Monte has developed special strains of fruits and vegetables particularly adapted to canning. Quality standards are always maintained.

large-scale advertising in the major women's magazines. This advertising made use of color pictures to stress the appetite appeal of the product, plus tempting recipes showing its easy preparation. A feature of every ad was the Del Monte label, for the "brand identification" now recognized as so necessary to successful selling.

The pay-off

Del Monte sales boomed phenomenally in the first years after the merger. Spurred by advertising, housewives were asking for this particular brand, rather than passively accepting whatever brand was offered. In itself this was a merchandising miracle. During this period, however, skeptics pointed out another reason for success: Calpak was born just in time to receive its share of World War I buying. Sales soared from \$37½ million in 1917 to \$55½ million in 1918. By 1920 they had reached \$85 million, How much of this was due to easy-money spending? How many housewives would consider canned foods an easily omitted luxurv if times got hard?

For lesser-known brands, these questions were answered quickly and unhappily. The bumpy U.S. recession of 1921 and '22 spelled disaster for many canners. For Del Monte, this period proved beyond doubt the wisdom of quality control and the

value of consistent advertising. Sales dipped only slightly in proportion to the losses suffered by other canners. Calpak maintained its dividends to stockholders and weathered the brief recession without serious damage. The early '20s were a preview of how Del Monte would fare during the depression of the '30s.

Because of its size, Calpak-and hence Del Monte-was in excellent shape to serve the network of chain grocery stores which sprang up during the 1920s. The chains favored Del Monte because it was well known and could sell itself at the least possible labor cost to the store. Just as important, however, was Calpak's ability to stand up under the impact of chain buying policy. Previously grocers had bought canned goods on an annual basis, which quickly solved the problem of financing the annual pack for the jobber and canner. Concentrating on low inventory and rapid turnover, the chains were fundamentally opposed to this practice. This threw the burden of financing back on the jobber, who promptly passed as much of it as possible back to the canner. Few canners could accept this load gracefully, since it meant investing tremendous sums during a brief period and then getting that money back in dribbles over a long term. Also involved were the costs and worries of warehousing each pack and maintaining inventories on a year-around basis, shipping each item a little at a time, as the product was ordered.

Whether the canners liked it or not, the responsibility for carrying a year-around inventory had become theirs. This was especially true for packers of the nationally known brands, such as Del Monte. At first this shift of inventory responsibility, started by the buying policies of most chain stores, was gradual. But during the depression, when grocers everywhere tried to reduce or limit their risks, it accelerated rapidly. The canning industry was coming of age—but with more than its share of growing pains.

What of the label?

During this period-1917 to 1930the Del Monte label design did not remain static. Certain changes were made, minor in themselves, but foreshadowing more important developments to come. About a year after Calpak was organized, the Del Monte label was endowed with more appetite appeal by the addition of new, hand-painted vignettes, which attempted to show the product as it might appear removed from the can and placed in a dish. Crude though these illustrations were, by modern standards, they were a marked advance for their time. The Del Monte shield also was redrawn at this time and the words "Brand Quality" were

Figures are for total Calpak sales.

in Del Monte's modern canneries



AFTER LABELING, the cans are automatically lined up in this machine and a shipping case filled at a single stroke. Today's techniques for packaging and handling of canned goods must be geared to high speed for economy.



PALLETIZATION has brought great manpower and space savings and enabled Calpak to boost the annual turnover in this consolidated warehouse at Alameda from six million cases 10 years ago to about 12 million cases today.

substituted for the earlier "Brand Extra Quality."

In 1918 the company took another stride toward descriptive labeling. Fruit size and type of syrup, for example, were given for the first time on the Yellow Cling Peaches label. Also the label now carried information about the other can sizes in which this same Del Monte product was available. Another forward step was the application of clear varnish to the labels for greater brilliance and resistance against soiling.

Next major label change came in 1928. For the first time, prominence was given to the style of pack inside the can. For cling peaches, this marked the introduction of such words as "halves" and "slices," factors of definite interest to buyers. Vignettes, though still hand painted, were life-like.

During the next seven years, like the rest of the nation, the officers and organization behind the Del Monte label were locked in battle with a formidable foe—The Depression.

Each industry had its particular problems during this trying period. Canners were no exception. They were harassed by three major conditions. The first of these-financing and maintaining a year-around inventory—has already been mentioned. The second situation was actually a result of the tremendous expansion

undertaken by the industry and its suppliers.

When packers needed more canning fruit, they were forced to underwrite the planting of new orchards by growers. Just as these new trees came into full bearing, the depression struck. With sales of their finished product drastically curtailed already, leading fruit packers now found they had bumper fruit crops on their hands-crops for which they were definitely committed either through loans or long-term purchase contracts with growers. One after another, canners began going out of business, selling their inventories below cost, thus further depressing the prices the solvent canners had to quote.

Blame for the third problem which now developed has been placed by some in the lap of the packaging suppliers themselves. An intense struggle for business was being waged by some of the major container manufacturers. A by-product of this competitive battle was unusually easy credit for almost anyone seeking to enter the canning field. In 1928 there were 40 separate peach-canning firms; 22 of these went out of business during the depression. At the same time, while competition between packaging interests was at its height, 59 new companies were started. Business was so poor that 33 of these soon folded. Thus, out of a total of 59 new firms, 55 closed their doors and liquidated their stock for whatever prices could be had. As one veteran of that period recalls: "It was like trying to maintain reasonable selling prices in a town where every business but yours was having fire sales."

Del Monte had several assets on its side during this time. First of these was the well-established appeal of its brand name, as a symbol for quality. Second was the fact that Calpak had already broadened its distribution base in terms of both distributors and retail outlets. Another was the fact that, as far back as 1924, the sales organization had been divided into 27 districts, each comprised of several wholesale grocery trading areas as set up by the Department of Commerce. During this same period the company had taken steps to adapt its shipping practices to the new smallbatch buying policies of grocers-an action climaxed by erection of an enormous consolidation warehouse at Alameda, Calif., where separate orders could be gathered into carload units for freight savings. Just as important was Calpak's expansion into the Middle West, thereby locating production of several important items nearer to the point of ultimate consumption.

Today this expansion program has reached a point where it almost refutes the regional connotation of the company name. More than two-thirds of California Packing Corp.'s production facilities are now located outside of the state of California.

Despite the welter of price cutting and a market flooded with distress-sale merchandise, Del Monte weathered the depression. Calpak showed a profit almost every year and gained many new customers. More than ever, too, it was studying what those customers wanted, both in terms of product and package. In 1936 the results of this study appeared on the Del Monte label.

Enter descriptive labels

Growth of the canning industryboth in volume and number of brands -had created a situation which required further label improvement, both in the sales appeal of the package and in telling the shopper exactly what was inside. In order to accomplish these two goals, Del Monte pioneered descriptive labeling in 1936. This meant new designs, artwork and plates for all principal Del Monte products. These "mechanical" expenses alone cost Calpak more than \$100,000 and this figure includes neither executive time nor the cost of actually printing millions of new labels. In addition, the firm promptly spent a very substantial sum for advertisements to tell shoppers why these changes had been made.

With this sweeping revision, Del Monte adopted the policy of showing the product by means of direct-color photographic vignettes on the main panel. It also eliminated the use of

gold in the border of the shield, using instead a color-value combination of red and yellow. But the biggest change occurred on the back panel. There, in blue text printed on a light green background, was provided all the information a shopper would need to buy just the product she wanted, in the style of pack preferred and the quantity to meet her family's needs most exactly and economically. Labels for Del Monte Yellow Cling Peach Halves, for example, told the size of the can, weight of the contents, number of peach halves inside, type of syrup used and also listed the other serving quantities in which this product could be purchased. All of this was given in simple, easy-to-understand terms.

Enactment of the Federal Food, Drug and Cosmetic Act in 1938 proved how well Del Monte's packers had planned. The labels they had introduced two years earlier met all of the Act's basic information requirements and even went beyond them in certain respects—as in telling how many pear halves were in a can, a useful fact for a woman planning a certain number of desserts or salads.

As experience showed the value of additional information, it too was incorporated into the Del Monte label. Basically, the label's design and color scheme remained unchanged, however, until World War II. Then, the same ink shortages which caused "Lucky Strike green" to "go to war" also eliminated the light green back-

ground of the Del Monte information panel.

At war's end, the shape and proportion of the Del Monte shield was refined slightly to permit greater vignette space. Not apparent to the casual observer, this change consisted of flattening the shield slightly and removing the two border knobs opposite the word "quality." At the same time, because of growing retail use of mass or jumble displays, the firm's Trade Mark Committee authorized a reduction of the information panel's depth to permit inclusion of a smaller Del Monte shield above it. This was done to gain brand identification on both faces of the can. It was also decided to maintain the information panel in white, rather than return to the light green which Del Monte had patriotically stopped using during the

Armed Forces requirements cut sharply into the quantities of canned fruits and vegetables Calpak could produce under the Del Monte label for civilian use during the war. Despite this, the brand emerged from the war period stronger than ever. One reason for this was a policy of fair-trade allocation, based on prewar volume. Another was the fact that the company maintained a consistent advertising program.

Behind the label

Few Del Monte customers have any conception of the gears that must turn in this vast, intricate organization to produce the can of peaches or peas they buy. For Calpak, satisfying Del Monte quality standards often means starting its selective processes even before the product reaches seed form. Its seed department, believed the largest of its kind, includes laboratories where special seed strains are developed for high yield and flavor; modern farms where Del Monte seed is produced according to requirements forecast a year in advance and processing plants where finished seed is cleaned, bagged and shipped to contract growers all over the nation.

As the world's largest packer of cling peaches, Calpak also operates the world's largest cling-peach orchard. This is Fancher Ranch, near Merced, Calif., whose 4,000 acres are divided by well-kept roads into precise half-mile squares. Because of its size, foremen patrol it in individually colored trucks—each with a different

DESCRIPTIVE LABEL pioneered by Del Monte in 1936 presented consumer information so completely and effectively it took the steam out of agitators' drive for nondescript "grade" labeling. Story was carried to consumers in full-color advertising spreads like this one in McCall's.





color scheme so that the superintendent won't waste time trailing the wrong man.

Calpak must pack in a few short weeks an entire season's crop-and just so much of that crop as it has pack quotas to fill. It must process, package and handle its wares at a minimum of cost if they are to be within reach of the public's pocketbook. This factor puts every step of its operations under the scrutiny of cost-analysis experts. In turn, it has caused the company to work in close harmony with the packaging industry, finding uses and improvements for machines that even their makers hadn't visualized. Calpak engineers discovered, for example, how to make a standard filling machine handle whole tomatoes at high speeds. In cooperation with suppliers, the company has aided development of such machines as sliced-peach fillers and high-speed labelers and casers. In dried fruit alone, its research department spurred some of the first commercial applications of Pliofilm and saran for this type of product.

Marketing the flood of Del Monte products also requires year-around labeling operations. Calpak has operated its own label plant from the beginning-a complete printing operation started by one of the founding companies when the San Francisco Fire of 1906 wiped out all of its sources of supply, printing plates and most of its label inventory. Located in Oakland, Calif., this unit now processes an average of 2,000,000 labels for Calpak every working day, using five-color letterpress. But even this is not enough. The company still buys a considerable number of labels from outside sources.

The basic methods of canning have changed but little since Del Monte made its national debut in 1917. The big changes have been in the raw products themselves, as in the development of special strains of fruits and vegetables particularly adaptable to canning and in the machines and techniques used to package and handle them. Today's canning machines are self cleaning and non-corrosive, as well as high speed. Today's canned goods, for both speed and economy, must take advantage of improved materials-handling devices. Use of lift trucks and pallets, according to Bruno Pilorz, operating manager of the firm's California Canneries Division, has contributed significantly to expansion in just the past 10 years. Formerly, a typical tomato plant might be hard pressed to process 50,000 cases a day; through palletization, this same plant now has doubled its output. Similarly, Calpak's big Alameda consolidation warehouse has boosted its annual turnover from an approximate 6 million cases to about 12 million yearly, at great manpower

Employee interest in improving company operations is stimulated by the fact that Calpak has always believed in promoting employees within the firm, rather than seeking key men from the outside. With but one exception, all of its present top officials have come up within the firm from such starts as sample boy, ranch hand and office boy, learning every phase of the business from buying fruit to soldering can tops and finally traveling East at the end of the season to help sell the pack.

Selling the pack" continues to be an important undertaking. To handle this key function, the company has a strong national sales organization, with its own sales offices or brokers in every important market from coast to coast. To support its sales force in the field, Calpak has continued over the years a strong and ever-widening program of consumer and trade advertising and sales promotion. In the latter field, two major annual events. the "Spring Garden Show" and the "Fall Round-Up," quite literally change the appearance of thousands of stores

all over the country. Grocers, who know both from Del Monte's trade advertising and their own experience that the brand's high rate of turnover means more profits, readily devote space and effort to displays. Last year's "Round-Up," for example, brought into being a whole fleet of grocer-acquired "chuck wagons" for the proper Western touch.

Featured in company-supplied advertising for these displays is its cartoon character "Chef Monte," dressed either in cowboy or gardener's clothing. But the real attraction is the Del Monte package itself, a symbol of an industry that has come of age.

CREDITS: More than 70% of California Packing Corporation's Del Monte labels are supplied by its own label plant in Oakland, Calif. Other major suppliers at present include: Cans-American Can Co., 100 Park Ave., New York 17. Jars and bottles-Hazel-Atlas Glass Co., Wheeling, W. Va., and Owens-Illinois Glass Co., Toledo 1, Ohio. Jar and bottle closures-Aluminum Co. of America, 801 Gulf Bldg., Pittsburgh 19, Pa.. and White Cap Co., 1819 N. Major Ave., Chicago 39. Labels-International Playing Card & Label Co., Inc., Rogersville, Tenn.; Schmidt Lithograph Co.. 461 Second St., San Francisco 7, and Stecher-Straung Lithograph Corp., 274 N. Goodman St., Rochester 7, N. Y. Shipping cases-American Box Board Co., 470 Market Ave., S.W., Grand Rapids 2. Mich.; Cornell Paperboard Products Co., 1514 E. Thomas Ave., Milwaukee 1, Wis., and Fibreboard Products, Inc., 1789 Montgomery St., San Francisco 6.

HUGE BROADSIDES to the trade announce special Del Monte promotions spring and fall. Colorful, action-packed literature gets the grocer's attention, for he is aware of the sales appeal of the Del Monte name.



Modern packaging

DESIGN



Northwest Pacific souvenir

In celebration of Seattle's Centennial Year, Societe has selected a candy novelty that's a long-time favorite in the area and packaged it in a totem-pole gift package symbolic of the Pacific Northwest region where this art form originated.

Societe has long marketed, as a bulk and summer souvenir item, its exclusive Candy Pebbles—an amazingly realistic candy imitation of Puget Sound beach pebbles. The new totem-pole package for this candy has a dramatic four-color design typical of the traditional totem poles made by the Indians of the region. With the real totem poles a star tourist attraction in the Pacific Northwest and the candy such a distinctive regional item, the company decided that the combination would make a hit with tourists and State of Washington residents alike during Seattle's Centennial Year.

Each totem-pole gift package comes complete with a labeled individual fibreboard shipping container for gift mailing.

CREDIT: Package, Puget Sound Paper Box Co., Seattle, Wash.

Tomatoes breathe in new window carton



Vine-ripened Robinson Crusoe brand tomatoes grown by Niland Growers Supply Co., Nyland, Calif., are traveling in this new window carton designed to permit free flow of cold air to every individual tomato during refrigerated shipment. The air-conditioned package was developed to avoid sweating and to allow the fruit to absorb oxygen, give off carbon dioxide and thus reach full color. Ten U-shaped cuts along bottom folds of the die-cut carton form short legs and air slits when carton is set up; cut-outs of body top fold down into the body, making wedge-shaped separators to hold four tomatoes securely against bruising. Locking single-tuck lid has an acetate window which "breathes" throughout the entire area for even ventilation. Shipping cases used are ventilated-type corrugated cartons or light-weight wirebound containers.

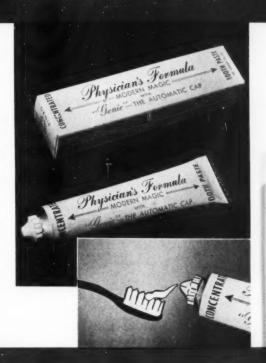
CREDITS: Carton (Stan-Pak), Standard Paper Box Corp., Los Angeles. Acetate, Celanese Corp. of America, New York.

HISTORIES

Automatic tooth-paste-tube cap

A self-dispensing cap that opens when the tube is squeezed and reseals itself when pressure is released is now being used for tooth paste by Physician's Formula Cosmetics, Los Angeles. The polyethylene plastic cap need never be removed from the tube and is therefore both a convenience and a sanitary feature. Instructions on the package say to "Slit center of dome on cap with sharp razor or knife" and lines on cap show where to cut. Another cut across the dome at right angles to the first can be made if a greater flow of paste is desired. Edges of cuts spread when tube is squeezed, come together to bite off the flow of paste and make a tight re-seal when pressure is released. The product using the new self-sealing tube cap is Physician's Formula's new concentrated tooth paste, packed in a new tube and carton lettered in red and blue on a white background.

CREDITS: "Genie" cap molded by Jay & Sunny Originals, Los Angeles, of Du Pont polyethylene. Tube and carton, Sheffield Tube Corp., New London, Conn.



Revitalized B.V.D. covers wide line of men's apparel

Practically everybody associates B.V.D. with men's underwear, but not many associate B.V.D. with a whole line of men's apparel including swim suits, sports shirts, pajamas, etc. A major aim of new management is to give the trademark new significance and a completely redesigned line of packages was one of the first steps. All B.V.D. products will henceforth be merchandised in these new boxes designed around a new B.V.D. label and the long-established slogan, "Next to myself I like B.V.D. best."

The color scheme in shades of red, grey and white emphasizes the strong masculine lettering of the famous initials. The packages have quick recognition singly or in mass display and for shelf-stock identity one end panel repeats the trademark along with complete stock information.

CREDITS: Design, Design Associates, Ltd., New York. Folding boxes, Empire Box Corp., Garfield, N. J.



Really scuffproof labels

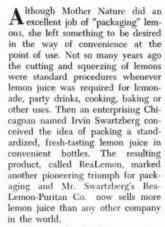
PRODUCTION AND MARKETING PROBLEM IS SOLVED FOR REALEMON PRODUCTS

WITH A HARD, NON-BLOCKING BAKED PLASTIC COATING



FLOWED-ON ACETATE coating over letterpress printing now protects paper labels for ReaLemon bottled fruit juices, which depend for eye appeal on unusual contrast of fruit colors against solid-black backgrounds. Brilliant gloss and trouble-free handling in labeling machine are assets.

REGULAR TESTS on laboratory abrasion tester insure scuffproofness of coated labels. There have been no complaints of scuffing since the new labels were first adopted.



However, the ReaLemon success story should not be over-simplified. There have been numerous obstacles to overcome in building the product to its present peak of market acceptance. Among the most difficult was a series of packaging problems involving the distinctive black-and-yellow label which Puritan adopted following World War II.

In gearing operations to shift from a restricted wartime economy to a buyer's market, one of the first phases included improvement of the ReaLemon label design to conform to product improvements arising from procurement of a new plant staffed with Army-experienced personnel. A decision was made to eliminate the hard "spot"-type label in favor of a more informative and eve-appealing wrap-around style. The designer, reasoning that the dominant use of vellow was essential in order to identify the product immediately as lemon juice, introduced a lemonshaped yellow panel to set off the principal type matter. He further concluded that black, a then virtually unheard-of color for a food product label, would provide the most dramatic contrast as a background for the



PRICE SPOT on bottle cap obviates marking of labels. Movement in shipping-case compartments does not affect plastic-coated labels; with ordinary varnish, their black surfaces formerly arrived badly searred.



entire display side of the label. This high-visibility combination, with any possible harshness relieved by the softening effect of the green glass bottle and a lavender "blossom" design on the display panel, won the enthusiastic approval of ReaLemon Co. officials and the design was turned over to a lithographing house for immediate production. The attractive new label was greeted with enthusiasm by food brokers as well as production personnel. When actual production began, however, unforseen problems involved in production, shipping and distribution with the new label ap-

The first problem arose in connection with the black background, considered vitally necessary for the desired contrast. Pure black proved a difficult color to print. Shipments of labels began arriving with the background in inconsistent and distasteful hues ranging from orange-black to purple-black, depending upon the predominant color used in the lithographer's gang run.

In addition, the varnished labels jammed in high-speed runs on the labeling equipment, resulting in costly shutdowns and waste of labels as well as manhours. Stacking of labels and variations in temperature and humidity in the packaging department were primary factors causing the labels to block. Adding further to the headaches of the company, ReaLemon bottles began reaching retailers' shelves with labels scuffed to the point of obliteration. The scuffing, which resulted from shifting of the bottles in their partitioned corrugated shipping containers, was particularly unsightly with the solid-black background.

The ReaLemon Co. experimented for months with many so-called scuffproof varnishes in the hope of eliminating jammed production lines and unsightly marring of the labels. Case after case of bottles bearing the test labels was shipped to and from various destinations by truck and rail, but the results were always the same. All tests with ordinary varnish coatings applied to labels having the black background were unsatisfactory.

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ACTUAL SAMPLE of ReaLemon label shows clarity and hardness of plastic-type coating. Letterpress printing was required to obtain the striking black background color. LABEL COURTESY WHEELER-VAN LABEL CO.

EALEMON HAS HANDY MEASURING CAP-The visylite lined cap is equal REALEMON FOR ICE COLD LEMONADE - Make a haif gailes. Just EALEMON FOR MIXED DRINKS—Use REALEMON in the same proportion as fred TEALEMON FOR HOT LEMONADE—When you feel the need of a hat lemonade, take TEALEMON FOR DAILY USERS—Brink lamon juice daily? Two takirspaans of REALEMO EALEMON FOR BAKING AND COOKING-DIR REALEMON like freshly squeeze ano teaspooniui — three caps full equal one tablespoon. REALEMON into a two-quart pitcher; add sugar (one-half to one cup); stir; add water; 4 nunces of REALEMON in a glass of hot water. Add sugar if desired give you the benefits of the joice of one average lemon. Take in a glass of water in strongth and flavor. "Reconstituting" assures uniform strongth and flavor. No muss - so fuss - so bother - just open the bottle and pour! emon juice for making pies, cakes, icings, puddings, salads, llavoring Write for FREE REALEMON Recipe Booklet Use REAL EMON for every use of Lemon juice After opening keeps best in refrigerator. CO lemen juice can vary up to 50% and Cherries . REALIME Products Twe tablespoonfuls equal ALWAYS UNIFORM - SHAKE WELL ... all fruit juices settle

lemon juice in Whistey Sours, Tom and Rum Collins, etc.

ECONSTITUTED for UNIFORMITY - Ordinary

Really scuffproof labels

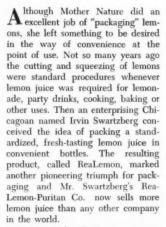
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to a supplier specializing in letterpress-printed labels having a scuffresistant, plastic-finished coating. This finish, based on acetate, is flowed on and baked at 375 deg. F. to produce a hard, protective coating over the printed matter. By actual wear-cycle tests, it was demonstrated that while the cost of this type label was somewhat higher than that of the gangrun lithographed labels with varnish coating, the savings in production and reduced waste, as well as great improvement in appearance of the finished package, more than justified the differential.

Tabulation of results on the scuffresistance tests, using a standard laboratory instrument, brought out some interesting facts. On the old labels, an average of only 25 or 30 revolutions of the test wheel was required to produce scuffing. The new plastic-coated labels, on the other hand, withstood between 400 and 500 wear cycles before becoming marred.

Actual production and shipping tests further confirmed the superiority of the new labels. The black was consistently a true, deep black, without the slightest discernible variation from label to label or package to package. Shutdowns on the labeling equipment were reduced practically to zero because the labels did not block or jam. Furthermore, the hard, slippery surface of the label, according to ReaLemon Co. representatives, made possible an increase of onethird in labeling production.

In a period of three years since adoption of the revised labels, no complaints have arisen due to scuffing. All the way from the ReaLemon plant to the retail-store shelf, the labels maintain their crisp, sparkling appearance.

Puritan is now using labels of this type on several bottled products, including the regular type ReaLemon lemon juice, ReaLemon lemon juice with sugar added, ReaLime lime juice and RealPrune prune juice, newest addition to the ReaLemon family. All the labels follow the same general type of family-design treatment, including the profile of the fruit and a colored blossom motif on the display panel, with detailed product and use instructions confined to the back panel of the label.

All the products use lithographed metal caps having a special pricemarking spot on the top, making it unnecessary to deface the label with price markings. The caps may also be used as a handy measure in dispensing

the products.

The labels are printed on sheet-fed rotary and flat-bed letterpress equipment. The decorative and protective coating is applied on high-speed coating machines which subject the printed and coated sheets to elevated temperatures for full development of the film properties. Close control of these properties is maintained by frequent control testing, with particular attention to the factor of abrasion resistance. Use of the abrasion-testing instrument provides an accelerated test under controlled and reproducible conditions, providing an accurate control of the toughness and durability of the finished labels.

CREDITS: Plastic-coated labels, Wheeler-Van Label Co., 13-21 McConnell St., S. W., Grand Rapids, Mich. Metal closures, Crown Cork & Seal Co., Eastern Ave. & Kresson St., Baltimore, Md. Bottles and shipping containers, Glenshaw Glass Co., Glenshaw, Pa. Taber Abraser testing instrument, Taber Instrument Corp., North Tonawanda, N. Y.

ACTUAL SAMPLE of ReaLemon label shows clarity and hardness of plastic-type coating. Letterpress printing was required to obtain the striking black background color. LABEL COURTESY WHEELER-VAN LABEL CO.

Standards



THEY LOOK IDENTICAL, but differences in height measured in hundredths of an inch could cause trouble with high-speed can-closing equipment when changing from cans of one manufacturer to another. Of cans shown here, Aviation is closest to new standard height (5.555 in.), while Havoline and Gulfpride are outside the allowable 0.015 tolerance of new standard.

When the containers used throughout an industry for marketing a single product are all pretty much alike in size, shape and materials, it might be assumed that it would be a simple matter to obtain agreement on a standard set of specifications. That was what members of a Petroleum Packaging subcommittee of the Packaging Institute thought back in May, 1951. They know better today.

Motor-oil cans, used in enormous quantities and already within a hair's breadth of standardization through natural development, were selected as the first candidate for standardization. Only the petroleum and canmanufacturing industries were involved. Benefits for both parties were expected as a result of standardization: Packers of oil would be able to fill and close cans from different manufacturers without making adjustments to machinery, some can manufacturers would be able to reduce costs where the standard can height was less than that of the old pattern and shipping-case dimensions could be made uniform.

In explaining the importance of container standardization in this field oil men point out that the one-quart containers, for example, are filled and closed at rates of 400 per minute. Adjustment of high-speed can-closing equipment for a change of size takes 25 to 30 minutes and necessary test runs to see if the adjustment is accurate mean that 40 minutes is the shortest down time you can hope for. As a result, a change-over from cans of one supplier to another during a run means production loss of at least 16,000 quarts.

As most packers today prefer to obtain their cans from more than one source even in the face of the problem described above, standardization was seen as a worthwhile undertaking important to users and suppliers. With the standard can, packers will be able to fill without interruption, drawing cans of various suppliers from stock or from carload lots on a rail siding without considering source, without scheduling for change-over time and without taking precautions against trying to fill one size of can on a line adjusted for another size. Fortunately, can diameters were already standardized among the can manufacturers, so height alone was the problem.

It soon became apparent that agreement could readily be obtained only on the one-quart size—no standard for five-quart and gallon sizes could be set up which would not require major changes in equipment by

most can manufacturers. Later, when a one-quart standard had been worked out, some packers hesitated to approve it because it called for a can slightly shorter than the one they'd been filling and they were afraid of sloppage during high-speed filling, which with motor oil runs as high as 400 cans per minute. This fear was eventually proved groundless.

Agreement was finally reached on a standard for the one-quart can and the proposed standard has now been referred to the American Standards Assn. for completion as an American standard. Meanwhile, many petroleum packagers are adopting the specification, as issued in its "proposed" status by the Packaging Institue, and several of the can manufacturers have signified their willingness to conform. Work toward standardization of the one-gallon and five-quart sizes is continuing.

It may be instructive to other packaging industries to observe the steps by which this degree of standardization was reached.

The petroleum industry itself, through the Petroleum Packaging Committee of the Packaging Institute headed by R. Chester Reed of The Texas Co., supplied the impetus. Some industry members make their

for oil

PETROLEUM INDUSTRY ACTS TO ELIMINATE THE

MINUTE BUT TROUBLESOME DIFFERENCES IN THE

DIMENSIONS OF ONE-QUART MOTOR OIL CANS

own cans and all have been heavy can users since the '30s, when socalled bootlegging of bulk oils demonstrated that lubricating oil for civilian automotive use required sealed, tamperproof, single-use containers for protection of consumers and of brand-name reputations.

Tentative specifications for a motor-oil-can standard were prepared first by the Petroleum Packaging Committee of the Packaging Institute. This committee is a working committee of the Joint Container Committee of the American Petroleum Institute and the National Lubricating Grease Institute. F. Norton Landon of the Sun Oil Co., A. R. Dismukes of the Gulf Oil Co. and A. J. Wood of Atlantic Refining Co. made up the subcommittee which actually prepared the tentative specifications.

The American Standards Assn., to which the tentative specifications were referred, called a meeting of all interested parties, including representatives of the National Bureau of Standards, military and Government procurement agencies, and representatives of the can manufacturers. It was decided that the standards proposed were basically satisfactory, but needed revision, including the addition of a one-gallon-size standard.

To carry through the work of revision and to seek out, if necessary, the views of interested parties not represented, the subcommittee, with Mr. Reed, held meetings at the offices of ASA with representatives of the can manufacturers.

After considerable discussion, it was agreed to let standardization rest with the one-quart cans for the

More than 10 months after the first meeting at ASA the standard for onequart round oil cans was adopted as follows:

Nominal size 401×509 Minimum liquid

capacity, no top

64.1 cu. in.

Over-all height, no top

5.555 in. ± 0.015 in.

Chuck-wall diameter 3.900 in. ± 0.001 in. Maximura over-all

height of tops 0.129 in, Maximum central-

panel diameter on tops

3.00 in. Number curled

tops per 2 in. 26 to 28

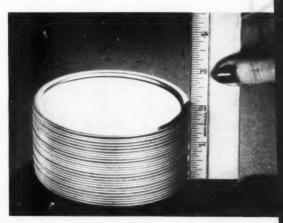
Although the nominal size is expressed as 401×509 , the actual can diameter is understood to be 4 in. The term, 401, implying 41/16 in., is the accepted designation in the trade for oil cans and is recognized as such by the Bureau of Standards. The can manufacturers prefer to continue use of this term, which appears in all their literature.

The liquid capacity is to be determined, when testing a can against specifications, with a can filled level with the flange and a flat piece of glass placed across the top of the can. Some packers felt that this specification would result in sloppage, particularly where filling is at rates as high as 400 cans per minute. However, this has not hampered acceptance of the standard; modern filling equipment designed for this speed range is even smoother in operation than that designed for lower speeds. The level filling of an unclosed can, specified as the procedure for measuring capacity against the standard, is explained as the only method of control that is both simple and accurate. The standard can body before sealing has, in the words of one oil man, "plenty of outage" and when filled flush with oil at 60 deg. contains a quart plus 11%. The minimum liquid capacity specified in the standard takes this fact into account. This also explains why lid height is carefully specified as a maximum figure. A plug-type lid of standard height when its edge is rolled and sealed, will clear the surface of a full-quart-filled can with a margin of safety.

The committee does not expect immediate universal adoption of the standards. It is expected, however, that can manufacturers will be guided by these standards when canmaking equipment is added or redesigned in the normal course of events, so that the standard will gradually come into use without causing added costs or inconvenience.

The members of the Petroleum Packaging Committee discovered that the process of standardization is one of evolving, through compromise and persuasion, a standard acceptable to all concerned, rather than creation of an intellectually arrived-at ideal.

STANDARD for tops provides that from 26 to 28 curled tops shall make stack 2 in. high.







PACKAGING













MODERN PACKAGING







10

PAGEANT



1 Gold-printed polyethylene bags now package the complete line of Daniel Hays, Inc., "Finger Free" women's gloves for added sales appeal and protection during merchandising and later in the home. "Shellene" bags, Shellmar Products Corp., Mt. Vernon, Ohio.

Colorful cerise and gold packaging promotes the new Ann Delafield Appetite Reducing Plan for sale as a compact unit in Rexall drug stores. The instruction book comes in a folder with an extending flap that slips into the sleeve of the box holding wafers wrapped in waxed paper-backed, gold-colored foil and unit-packed vitamins. The box base is cellophane overwrapped for added protection. Paper wraps, labels, folders and boxes are supplied by Rexall's own packaging department. Foil wrap, The Dobeckmun Co., Cleveland, Ohio. Unit packs, Ivers-Lee Co., Newark, N. J. Cellophane, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

Bridal Satin Parfum, a new French luxury fragrance by Maison Troisville, Inc., features a clever perfume-jewelry tic-in. In the hand-tooled, white-leather box containing a ½-oz. bottle of perfume are two 18-k. white gold or 14-k. pale yellow gold guard rings set with semi-precious stones, selling for \$85. Box, Art Leather Craft, New York. Bottle, Carr-Lowrey Glass Co., Baltimore, Md. Label, Dennison Mfg. Co., Framingham, Mass. Tassel, H. J. Levine Bros., New York.

A Shen-Valley Meat Packers, Inc., is using this new type of bacon package with film and board prejoined. It speeds production operations by eliminating the need for picking up single sheets of film and placing a loose board in position. The bacon is placed on the film, the film is lapped over the board and heat sealed, "Semi-Seal" wrap, Milprint, Inc., Milwaukee, Wis.

Subtle changes have improved the package without losing the time-honored recognition of the Angostura Bitters bottle. The shorter new label that is not a tuck-under permits the user to see when supply is getting low. A plastic snap-on shaker cap replaces the former cork insert. A minor revision in the bottle finish accommodates the new cap. Bottle and closures, Owens-Illinois Glass Co., Toledo, Ohio. Cel-O-Seal bands, DuPont. Labels, Dennison & Sons, Long Island City, N. Y.

The aerosol container used by the Cook Chemical Co. for its Real Kill Insect Bomb features a transparent butyrate plastic cap enabling packages to be stacked to save shelf space. The cap has re-use value as a coaster or trinket container, "Spra-Tainer" container, Crown Can Co., Philadelphia. Cap molded by Calmar Co., Los Angeles, of Tennessee Eastman's Tenite II.

The Weber Kraut & Canning Co., Inc., reports that these one-trip metal cans, fitted with polyethylene liners save time and cost in packaging their O.K. brand sauer kraut, are more sanitary, keep the kraut fresher and have resulted in increased sales volume. "Showbag" liners, Central States Paper & Bag Co., St. Louis, Mo. Can, Continental Can Co., New York. Label, Ralph J. Schmidt Printing Co., St. Louis.

Character bottles in the form of Lincoln statues for the five flavors of pure fruit syrups marketed by Lincoln Foods, Inc., are re-usable as banks. There is a coin slot in the metal screw cap. Bottles, Owens-Illinois Glass Co., Toledo, Ohio. Closures, Bernardin Bottle Cap Co., Inc., Evansville, Ind.

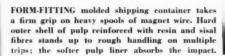
A die-cut easel in the base of the set-up box for Harriet Hubbard Ayer's new "Ayer Magic" cream enables its use for display. The ease is of transparent polystyrene flecked with gold, with a pink polyethlene cup and cap liner. Boxes, Walter J. Jamieson Corp., Rochester, N. Y., and Heminway Corp., Waterbury, Conn. Box wrap, Donrico, Inc., New York. Plastic container, Stanley Sapery Co., New York.

Transparent cellulose acetate is used for this "So-o-o-o Big" silver gift set for children marketed by the Holmes & Edwards Div., International Silver Co. The base is of extruded acetate. The acetate sheet base has two small ridges punched and cut to hold the silver in place. Package, Shaw-Randall Co., Inc., Pawtucket, R. I., using Eastman Kodak Co.'s Kodapak acetate.

11 Cartons that are scale models of the Rock Island Rocket's locomotive, passenger car and lounge car are aimed at eapturing the juvenile market. The Luck Candy Co. packages its Rocket Pops in this new "Rocket Train" container. Cartons, Sutherland Paper Co., Kalamazoo, Mich.



SIMPLE CLOSURE for this loaded container is metal strapping placed lengthwise. The shipping address and the specification labels are of pressure-sensitive paper; the permanent return address is of steneil-sprayed lacquer.





Armored shipper

PULP STRENGTHENED WITH SISAL FIBRE AND PHENOLIC RESIN IS MOLDED

TO CRADLE DELICATE MAGNET WIRE IN CUSHIONED, CONFORMING HALVES

In developing a shipping container that tames the box-smashing and self-destructive proclivities of heavy spools of fine magnet wire, Anaconda Wire & Cable Co. has come up with a two-layer form-fit container that may have applications in a number of fields. It has already been suggested to manufacturers of armatures, who could use it almost without modification. Others who ship heavy but precision-surfaced machine parts may find this particular two-ply, molded pulp-and-fibre container an interesting solution to their own shipping requirements.

Ordinary molded pulp has long been used in this country as a cellular cushioning medium for such products as apples and eggs, while resinimpregnated molded pulp has for some time been used in England and on the Continent in applications where greater strength is required. Reinforced pulp is now coming into use here, often with strengthening fibres incorporated. The new Anaconda container uses both plastic resins and sisal fibres in the pulp to obtain a composite construction precisely fitting the company's requirements.

The container has an outer shell impregnated with high-solids phenolic-resins solution to supply impact-resisting qualities and a softer pulp liner without impregnation to supply shock-absorbing qualities.

As used by Anaconda, the molded container, weighing 4.33 lbs., ships up to 80 lbs. of wire and is so durable that it can make many round trips, the customer sending the empty spools back to the company in the same case.

It was Anaconda's purchasing agent who got the ball rolling in his efforts to find something that would eliminate the high freight costs and unsatisfactory performance of heavy wood boxes. The boxes, to be strong enough to carry and protect the wire, had to be so heavy that they made up a disproportionate share of the gross weight and bulk of a shipment. The extra weight, boosting the total case weight to 150 lbs. in many shipments, was aggravating the shipping problem in another way-the cases were so heavy that they were difficult to handle and were frequently dropped. The visual impression of massive ruggedness conveyed by the wood boxes also seemed to encourage freight handlers to assume that case and contents alike were indestructible, which was far from true.

Cases were failing in shipment and valuable wire was being damaged. Rising freight rates and other costs were having the same effect on break-even points at Anaconda as elsewhere in industry, so the quest

for a better package was considered an important one.

A research crew at the Muskegon, Mich., plant was given the assignment to build a container that would safely take magnet wire through the worst abuse that the most rugged freight handling and warehousing would ever be likely to offer.

The problem

Magnet wire is used for windings of electric motors, relays, transformers and other equipment. It is thin, to permit many turns, and for maximum conductivity it is made of highly refined almost pure copper-which is soft, heavy, expensive and a strategic metal in critical supply. The wire is supplied in diameters from 0.1265 in. (a trifle more than % in.) on down to a gossamer 0.0031 in., costing \$50 to \$60 a pound, used mostly for the windings of delicate instruments. In addition to bare wire, the material is supplied with a wide variety of insulations, including paper, enamel and cotton and glass yarns.

Slight imperfections resulting from shipping damage to this precision-built product may be more disastrous for the user than gross damage—with discovery sometimes coming only after the finished equipment into which the wire is built flunks final testing or fails in use. The insulations are particularly vulnerable to hard-to-detect damage and must be guarded against wetting.

It was apparent that rough handling was what had caused the destruction of the wooden boxes. Standard shipping quantity was 10 spools, of 6-in. diameter and 33-in. over-all length. The average weight of wire on a single filled spool was 10 lbs. Wire was packed on a sturdy flanged metal spool and protected by a wrapper of 30-lb. kraft paper.

This 10-spool shipping unit had a net weight which often ran well over 100 lbs.—as much as 150 lbs. gross case weight when packed in the heavy nailed and metal-strapped wood box. Visualizing such a concentrated load dropped and landing on a corner, it is easy to see that the wood box was being asked to exceed reasonable expectations.

The first step was the listing of the kinds of damage to magnet wire that had cropped up in the past which could properly be blamed on poor packaging:

(a) Damage to flange ends of the

spools that carried the wire. Spools are often placed directly on machines that feed the wire to winding devices; distorted spool flanges either wouldn't fit on unwinders or would cause wire to pay out improperly, resulting in damage or breakage.

(b) Access of moisture, infiltrating dust or other foreign matter to the wire. "Cool, dry, clean" shipping and warehousing environment could not be counted on by any means.

(c) "Hopping" of the spools. In a container that offered any freedom of motion, one spool's edges served as a weapon to attack another spool's thin wrapper and the wire itself.

These were the major sources of damage to the wire. Anaconda's researchers went further to set up optimum specifications. They wanted:

 A returnable container in which spools could be sent back to the company for re-use.

2. Reduced shipping-unit weight for faster, easier handling.

Reduced tare weight for freight-cost saving.

 No sharp corners to injure hands or tear clothing.

No splinters. The splinter hazard seemed to rule out ordinary wood-box types.

6. A minimum of interior packing.

Users called this a nuisance and hazard, and it was hoped that it could be eliminated entirely.

 A "grab-able" design. The near-100-lb. weight required a shape that a man could grip. Hand holes were considered.

 Easy removal of spools, once a package was opened. Prying a spool out of the package meant chances for spool or wire damage.

9. A handy tray for the user. If possible, a container was desired that would be in two parts so that after the lid was removed, the bottom section would make a convenient tray for storage and handling of the spools of wire.

Items 5 and 6 of the specifications immediately suggested a form-fit design, such as could be made only by molding. A form-fit container in two identical halves was drawn up on paper. An eight-spool quantity arranged in two rows of four spools each made the most conveniently shaped stable unit and brought the shipping unit's weight down into a more easily lifted range.

This original design was made up in two different materials—one a combination of kraft pulps and one a glass-fibre mat treated with polyester resin. Six sample shells of each material, with full wire loads, were sent

OLD AND NEW methods contrasted. The pallet load of new molded pulp containers carries same weight of wire as 24 wood boxes shown at left.





STORAGE SPACE is greatly reduced, as halves of new molded containers nest when they are empty. The empty wood boxes require approximately three times as much space as is needed for the new molded containers.

to a commercial testing laboratory for comparison along with two of the returnable-type nailed wood boxes then in use.

The laboratory's tests involved use of a 7-ft. revolving steel drum with baffles. Watching and recording progressive signs of damage while revolutions of the drum were counted gave a basis for comparisons among the various designs. In addition to the drum test, the laboratory subjected the loaded containers to simple drop tests, letting them land on all of their surfaces and edges on a concrete floor. Moisture-content uniformity was established for all three types before testing by exposure to 50% relative humidity at 73 deg. F.

The laboratory's report came back complete with photos and reports on each individual container's performance, plus an interpretive summary.

Indications were that, with proper closure, the molded shells could match the durability and retention of contents of the then-current nailed wood boxes. The containers tested had been closed with a variety of materials and methods, and it seemed at this point that choice of the best closure method, plus some extra strength in the container, might produce a package that would be superior.

Strengthening of the molded containers came first. Different fibre materials were tried; different flange widths, where the two sections of the container joined, were tested and, finally, a new combination of materials was combined to produce the final container with its two-layer shell—resin-treated sisal fibres and kraft pulp for the hard outer shell and soft kraft pulp for a cushioning liner.

Closure improvement was next. The testing laboratory's comments on the three methods tried (pressure-sensitive reinforced tape, wire and metal strapping) had indicated better performance with three bands of metal strapping, two girthwise and one lengthwise. Tests by Anaconda on the strengthened version of the container indicated that two lengthwise bands of metal strapping were sufficient.

The container in its final evolution at Muskegon was similar in shape to those tested originally, but the fibre material was stronger, the flanges where the two half-shells met were narrower and both of the materials which had been tested individually were combined. The outer shell of the container uses special washed sulphate kraft, selected Manila bond and strengthening fibres of sisal 1-in. to 1½-in. in length which, after mixing and refining to bring out maximum strengths, is vacuum preformed, pressure molded to final dimensions and then partially impregnated with a high-solids phenolicresin solution.

.The inner liner, formulated of Southern kraft and special washed sulphate kraft, is vacuum pre-formed and then pressure molded to its final dimensions like the outer shell. However, it is slightly thinner and it is not impregnated with a resin solution, but instead is coated with a vinylbased resin finish. This finish improves shock and scuff resistance, but produces a material only half as hard as the outer shell—useful in cushioning the contents and able to grip the spools' flange edges firmly when the container is strapped together tightly.

The two layers of each half of the shell are fastened by a staple through the flange at either end and can be separated easily. Assuming one layer was damaged, it would be a simple matter to salvage the other layer, a factor which may produce savings over a period of time.

A wire-loaded sample of the improved container was shipped to the testing laboratory. Falls and drop tests which had left the previous containers spilling their contents through large gaps succeeded in producing only some crushing at the edges of the shell. A continuation of the battering, far beyond anything the container would be expected to endure in its normal lifetime, produced some cracking, tearing and depressions in the flat areas of the surface, but the container still remained an integral unit and retained its spools. In all, the container endured 125 falls in the revolving 7-ft. drum and eight drops from a 30-in, normal handling height onto a concrete floor. (The wood boxes disintegrated at 24 falls.) Ninety per cent of the originally set up list of desirable characteristics was secured.

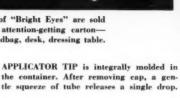
Among the interesting advantages of the new molded container is the easy refastening by the customer when empty spools are returned. The wood boxes annoyed customers who had to be asked to refrain from using nails when refastening, as this often made it impossible to re-open the box without destroying it. Now customers simply load empty spools into the containers and lash two or three of them together with wire, twine, reinforced tape or whatever else is convenient. With the light load, any of these methods suffices.

At the Anaconda plant, empties can now be nested for storage, cutting by almost two-thirds the space required for equal wire-carrying capacity in comparison with wood boxes.

CREDIT: Container, General Fibre Co., 1723 Locust St., St. Louis 3, Mo.



THREE TUBES of "Bright Eyes" are sold as a unit in an attention-getting cartonsuggested for handbag, desk, dressing table.





Little squirt

MINIATURE SQUEEZE TUBE THAT DOES AWAY WITH EYE DROPPERS

OFFERS A CONVENIENT NEW METHOD FOR SINGLE-DROP APPLICATIONS

First commercial application of an interesting new type of tiny polyethylene "squeeze" package, designed for single-drop or single-dose applications, is Aziza's little tube for eye drops.

With this convenient container, eye drops may come out of the medicine chest and go right into a woman's purse along with other cosmetics. The package-as easy to carry as a lipstick -is a miniature injection-molded polyethylene tube which serves both as a container and applicator, eliminating entirely the use of an eve dropper. The user simply takes off the securefitting polyethylene friction cap and squeezes the tube gently to squirt out just one drop of the preparation into the eve.

Aziza's adoption of these convenient "little squirt" tubes points up the many possibilities of this type of container not only for eye drops, but for many other products where only a drop at a time-or a single measured quantity-is needed. The containers could be used for perfumery, lotions, many types of medications, as well as such products as household glues, artist's supplies, lubricating oils, etc.

Aziza is packaging three of the little tubes together as a selling unit priced at \$1.25 in a folding display carton called "Bright Eves." According to the company's promotion, one tube is for the handbag, one for the desk drawer and one for the dressing table to relieve television eyes, nightclub eyes and tired eyes in general. Single units of one tube are also to be offered at 50 cents.

As the efficacy of eye preparations is reported to be affected by light, the Aziza containers are produced in opaque aqua blue polyethylene. Product lettering is silk screened in black. The complete container including the tapering applicator tip is injection molded as one piece and the bottom

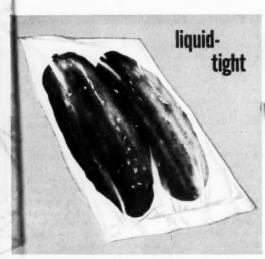
is heat sealed. A tight seal is achieved due to the bonding properties of the polyethylene. The containers are filled through the top by a hand operation, but development work is under way to perform this operation mechanically. After filling, the tubes are closed with friction-fit polyethylene caps.

The same color scheme-aqua and black-used for the squirt tubes has been used for the display cartons. The cartons are scored and die cut to provide notches to hold the three tubes securely in place. The fold-up flap carries an attention-getting illustration of a pair of eyes showing how the container is used to apply the contents.

CREDITS: Polytheylene applicator tubes and closures, Plax Corp., Hartford 1, Conn. Silk-screen printing, Modern Decorating Co., 4914 Hudson Blvd., West New York, N. J. Cartons, Brooks & Porter, Inc., 304 Hudson St., New York 13, N. Y.

Best way to wrap up a

Hard-to-package products look better, keep



PLIOFILM seals pickles, sauerkraut and oysters in their own brine, without leakage or moisture loss. Lets customer see contents.



PLIOFILM holds up to 10 pounds of any bulky fruit or vegetable, without danger of breakage—aids volume selling.

Por more than twelve years industry has been solving many of its toughest packaging problems with PLIOFILM—Goodyear's transparent rubber hydrochloride film.

This unique film has many advantages. It is tough and durable, with strength to hold heavy goods. It is hard to tear, split or puncture—won't shatter or run. It seals moisture in—or out—insuring quality protection. It has good dimensional stability—doesn't pucker or shrink. And its sparkling transparency gives your product a "buy me" appeal.

Got a packaging headache? Maybe PLIOFILM's your medicine, too. Write: Goodyear, Pliofilm Dept., Akron 16, Ohio.

problem

better in PLIOFILM

punctureresistant

THE PERFECT WRAP for roasts, poultry and all irregular products, PLIOPILM won't shatter or run. Its clear transparency speeds self-service sales.

prevents corrosion



PLIOFILM keeps spark plugs from rusting and corroding by sealing out harmful moisture. If your problem involves keeping moisture in or out, try PLIOFILM. insures cleanliness

PLIOFILM keeps linens and other textiles clean until sold. Doesn't shatter or split in shipment-eliminates rewraps.

Good things are better in

Pliofilm

GOOD YEAR
PACKAGING
FILM

3-way protection against air, moisture, liquids

Pliofilm, a rubber hydrochloride-T. M The Goodyear Tire & Rubber Company Aircon, Ohio



The figures that are the focal point of this flasher display promoting Bulova watches disappear and are replaced by watch illustrations when the flasher goes off. With the flasher on, hundreds of small perforations in the front lithographed picture permit a back subject to appear, erasing the front picture. The display, made of wood and metal, has three interchangeable inserts for seasonal promotions. Display, Display Guild, New York. Lithography, Kindred, MacLean & Co., Inc., Long Island City, N. Y.



A new type of carton that doubles as a retail display piece for butter has been adopted by the Middlebury Co-Operative Creamery Co., an affiliate of Mid-West Producers Creameries, Inc. The die-cut display holds 5 lbs. of butter—20 quarter-pound prints packaged in new foil wraps. By adopting the new counter carton, Middlebury reports it is wrapping butter in foil for the same over-all cost as its previously used conventional 1-lb. cartons, with the added advantage of more convenient merchandising of smaller units. Display carton, Sutherland Paper Co., Kalamazoo, Mich. Foil wraps, Milprint, Inc., Milwaukee.



DISPLAY

A complete Christmas lighting department is provided by this lithographed paperboard floor bin 54 in. high, 19½ in. wide and 12 in. deep, designed for use where space is at a premium. The picture panel at the top lights up. The display and merchandise, including Noma Electric Corp.'s sets and replacement lamps, are shipped in a single handy-to-handle package. Display, Kindred, MacLean & Co., Inc., Long Island City, N. Y.

Redesign of the display carton for the Wm. A Walthers Co.'s "Goo" allpurpose adhesive was based upon the results of a questionnaire sent to principal dealers selling the product. Changes include use of numerous spot illustrations showing product uses, a 24-tube carton instead of a 12-tube one, utilization of back panel to answer customer questions about the product and brighter colors for display contrast. Design, Richard M. Franz, Milwaukee, Wis. Display carton, Shadur Paper Box Co., Milwaukee.





For summertime promotion of Caladryl—a lotion for relief of sunburn, poison ivy, insect bites, etc.—Parke, Davis & Co. has brought out this sun-dial window display and its companion counter merchandiser for drug stores. Both are lithographed in six colors on paperboard. A reproduction of the Caladryl bottle appears on the larger unit, while the smaller one has a die-cut front piece to hold three actual bottles. Also supplied are paperboard bottle toppers as display aids for individual bottles. Display, Forbes Lithograph Co., Boston.

A bright-eyed Scottish lass in full Highland regalia promotes the new Ansco "3-Roll Economy Pak" of photographic film. Her hand, holding the Ansco package, moves up and down. This motion display, lithographed on paperboard in eight colors, is operated by a flashlight battery that maintains the motion 24 hrs. a day for two weeks or more. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.



GALLERY

Gillette Safety Razor Co.'s new window display was designed to tie in with the Triple Crown telecasts and broadcasts of the "big three" racing events—the Kentucky Derby, Preakness and Belmont Stakes—through a curved panel that hooks to the front of the colorful diecut display. Removal of the panel enables use of the unit for straight promotion of Gillette Blue Blades. Display, Einson-Freeman Co., Inc., Long Island City, N.Y.

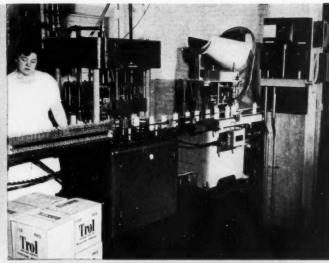




A new pilferproof unit for mass display of razor blades, introduced by the Pal Blade Co., is designed to overcome the pilferage problem that has impeded maximum razorblade volume in supermarket and grocery outlets. The metal unit has three compartments for displaying the three types of Pal blades: double edge, single edge and injector blades, each packaged on big 5-by-7-in. cards—too large to be disposed of by the shoplifter. Display, General Display Case Co., New York. Cards, Wincraft Printing Co., New York.



CONSUMER PACKAGING of Trol greatly expanded Odell's operations, requiring high-speed filler, automatic cartoner.



BOTTLES ARRIVE at head of line in printed re-use shippers. New 16-head filler has speed of 120 a min. Present production requires only 32, leaving a reserve for future expansion. Capper (rear) handles 60 a min.

The growing line

ODELL'S TROL OPERATION ILLUSTRATES THE IMPORTANT STAGE OF TRANSITION

FROM LIMITED SEMI-AUTOMATIC TO WIDE-RANGE AUTOMATIC PACKAGING

When a company that has packed its products only in commercial sizes turns suddenly and successfully to the marketing of consumer-size packages, it is likely to mean that the packaging stages of the operation will demand an increasing share of attention quite out of proportion to the increase in volume.

The Odell Co. of Newark, N.J., supplies an interesting example of a company which has successfully made the transition from commercial pack to consumer marketing. Gallon bottles and a 16-oz. professional size had always carried the firm's hair-care products to the barber-shop and beauty-parlor trade until, during World War II, Odell introduced Trol

hair tonic in a variety of consumer sizes. The product had quick success at retail level, but wartime restrictions on new bottling equipment prevented the rapid increase in distribution that might have been possible.

When it became apparent after the war that Trol's consumer acceptance was durable, the company decided to expand output. The tricky problems imposed by a foaming product which requires a number of package sizes for proper market coverage have been solved with a minimum of expense and waste motion. At present, bottling proceeds at a rate high enough to back up an intensive advertising and promotional effort; the likely step to near-national distribution can be

made at any time in an orderly way.

Both the present ample production and the potential ease and economy of a shift to still greater production have been made possible by the choice of a compact nucleus of automatic equipment—a filler and capper which are efficient even though teamed at present with semi-automatic and manual stages in the line.

The automatic equipment has paid for itself in short order, the company points out, through manhours saved and increased production per manhour, although its speed potential has not yet been fully utilized. The reserve speed now held in check by semi-automatic and manual stages can be brought into play by making



LABELING (foreground) remains semi-automatic, but 45-permin, speed is adequate for present stage of production expansion. Labeler operator controls entire line with stop switch.



CARTONER requires only hand feeding of bottles, received from labeler on conveyor table (right background), also offers reserve speed for future expansion.

the line fully automatic whenever distribution growth demands it. That step to doubling of present bottling speed will involve comparatively minor expense.

Bridging the gap

Because the Trol bottling line as it is running today still employs portions of the hastily adapted line set up in 1943 when the consumer product first appeared, it is helpful to trace those early stages of development. It is the successful blending of the old equipment with new high-speed machines which has made the transition period so smooth for Odell.

Founded in 1895, the company by 1943 was a well-established manufacturer of hair tonics and shampoos for the barber-shop and beauty-parlor trade. That war year saw a shortage of alcohol which curtailed the output of many leading hair preparations; the Armed Forces' PX demands helped to keep drug-store shelves understocked. Odell, entering this market with its new non-alcoholic hair dressing, found itself with almost immediate distribution in New York and much of the Atlantic Seaboard.

Fortunately for Trol in that period of wartime equipment scarcities, the

company already had a bottling machine. It was a straight-line vacuum bottler, non-automatic, which had been used to fill the 16-oz. barberstyle sprinkler bottles with American Beauty hair tonic, the company's principal product before the advent of Trol. As Trol caught on, the old manual unit was operated at top speed through the remaining war years, always working on back orders. The machine had been adapted to fill the 3-oz. syndicate-store size and the 6-oz. and 12-oz. drug-store sizes.

After several postwar years, during which the product had proved it could hold customer loyalty in the face of heavy competition, the company started to plan its postwar development in the consumer field. With Trol as a nucleus, Odell developed a line of preparations including shampoos, an after-shave freshener and other items based on its professional line. This added up to 12 different products, each with three or four pack sizes. At the same time the company hunted for equipment that would get this variety of products into an assortment of container sizes. Although the company had enjoyed success in its initial consumer marketing experience, the approach to the problem of expansion was characteristically cautious and exploratory. The equipment finally selected fitted this exploratory-growth pattern remarkably well. Minimum expense, maximum flexibility and automatic operation only in those areas where most is to be gained from it characterize the installation as now operating.

A survey and calculations, prepared by the filling-machine suppliers, on which the present installation was based compared the filling of 16-oz. bottles of Trol on the old machine with the performance expected from an automatic filler in series with an automatic capper. These two units, plus a short section of bottle conveyor, were in theory linked up with the semi-automatic labeler then in use. To bottle the professional size of Trol. this hypothetical line-up was estimated to require four instead of the previous seven employees and offered an increase in output of 100% or greater. Cost per bottle of the filling operation could be reduced by about two-thirds.

Automatic equipment

The automatic equipment which offered this performance was chosen. The filler is a rotary vacuum type with



COMBINATION DEALS are an important part of Trol's marketing technique at this stage of the product's expansion in the consumer market.

16 filling valves and has a rated capacity up to 150 containers a minute with a non-viscous, non-foaming liquid. Trol's foaming quality, the narrow-necked sprinkler bottles and the manual and semi-automatic stages in the present line prevent operation in the higher ranges at this time.

NEW PRODUCT is Hair Trainer for children. It is currently handled on old straight-line fillher, which offers sufficient speed for this non-foaming product with open-mouth bottle. It has plastic sprinkler cap. Sleeve makes each bottle a display unit.

Odell's HAIR TRAINER

The filler takes the 3-, 6- and 12oz. bottles with only a 20-min. change-over time; change-over to 16oz. size requires 1 hr. to install the longer vacuum stems required by the tall barber-style bottle.

All bottles run on this line have the identical narrow sprinkler orifice, with the lip of the opening beveled to guide the flexible vacuum-filling stem into any slightly out-of-line bottles—thus alignment is not critical.

The automatic capper selected is a single-head unit which will cap the three larger sizes with only minor height adjustment; an easily made gear change readies the capper to take the 1-oz. and 3-oz. sizes. All sizes capped on this line now take the identical 20-mm. metal screw cap with saran-coated liner without product identification; any future change in cap size can be accommodated by minor adjustments.

Bottles pass through the filler and capper automatically and travel to the old semi-automatic labeler. The operator here must pick up each bottle as it approaches, place it in the labeling cradle and then place it back on the conveyor which discharges it to the old packing-conveyor table. This operation could have been made automatic also, but the immediate advantage would have been slight—the machine with a good operator has a high capacity. Even more im-

portant, the labeler is sufficiently automatic to enable its operator to give each bottle and its filling and closure a thorough inspection as it passes through her hands. The labeler operator has within easy reach a master cut-off switch to stop the bottling line whenever inspection discloses malfunction anywhere. This switch will not restart the line; that must be done from a box close to the bottler, from which the bottling and capping mechanism can be closely observed.

The 16-oz. bottles are simply replaced in the compartmented shipping cases, without unit cartons. Some of the smaller bottles get this same treatment. But the bulk of the drug-store sizes go into folding cartons on a new automatic cartoner. The cartoner, which requires one operator to feed bottles two at a time, can handle bottles at 60 per minute.

At any given time, Odell usually has a special combination-offer, sleeve-cartoning operation under way. Such a set-up may combine one larger cartoned bottle with an uncartoned smaller bottle of another item in the company's line. It is not practical to mechanize these short-run and widely varying special packaging operations.

Receipt and storage

With the installation of the new equipment, Odell enlarged its quarters, obtaining for its own use a onestory building adjoining the plant in the rear. This new area is used for receipt and storage of supplies, including bottles and some raw materials. More economical purchasing and handling of bulk liquids was secured by installation of large built-in tanks in this new space. This improvement freed the original floor area for most efficient installation of the bottling line, cartoning and packing operations, which are set up so that movement along the bottling line is an integral part of the motion of materials from rear-door receipt to front-door shipping. Mixing tanks on the second floor of the original building receive their charges of bulk materials by metered pumping from the tanks in the new building and deliver their output by gravity through flexible tubing from the ceiling of the bottling room below.

Current advertising and promotional efforts by the Odell Co. are gradually increasing the demands on the bottling line. This was anticipated and a series of steps has been mapped (This article continued on page 190)

Burt makes cartons by the millions You'll be proud of yours



F. N. Burt Company Inc. - Manufacturers of Small Set-up Boxes, Folding Cartons and Transparent Containers - 500-540 Seneca Street, Buffalo 4, New York - Offices in Principal Cities Or Write Direct - Canadian Division: Dominion Paper Box Co. Ltd., 469-483 King St. W., Toronto, Canadia

SAVE HALF YOUR MONEY

...own a

Hayssen

automatic

TEXTILE WRAPPING MACHINE

A Hayssen unit costs you less than you think and occupies about half the usual floor space. This machine wraps 35 or more packages per minute with one operator. You get a neat, tight, uniform package with electric-eye registration of printed overwrap... extra protection for your product and increased sales appeal.



A FULL LINE OF MACHINES WRAP

Sheets, Pillow Cases, Bolts of Fabrics, Curtains, Underwear, Shirts, Towels, Handkerchiefs, Hosiery, Batting, Yarn

The Hayssen Textile Wrapping Machine handles heat-sealing cellophane, pliofilm and polyethylene. It overwraps cartons, trays, flat cards and u-boards ... handles the most delicate fabrics and fluffy material like cotton and wool bats. Special attachments (electric eye, roll-type top labeler and

printer, card or u-board feeder) are available.

Over 42 years' experience gives Hayssen machines unmatched performance, low first cost, overall economy of operation and maintenance. Many Hayssen units are in use today that were purchased over 20 years ago.

WRITE for folder on Hayssen Textile Wrap-



packag

Special

WESTERN STATES

Section

July 1952

WEST COAST: 1952

FOOD IS STILL NO. 1 IN WEST

COAST PACKAGING; IT FIGHTS A

BATTLE AGAINST COSTS TO HOLD

ITS VITAL EASTERN MARKETS



WATER CONSERVATION, as illustrated by the vast Grand Coulee project, is behind the growth of packaging on the West Coast, furnishing irrigation for millions of acres of reclaimed food lands and power to factories that make containers and package the crop.

Pood processing, the Cinderella packaging industry of the West Coast, is playing 1952 as a year of caution. After a dozen years of fabulous growth, the industry is consolidating its gains. For Western packers see competition stiffening in areas nearer to the big consumer markets of the East. They see prices of their own products falling while most costs are still rising. They feel the squeeze on their margins and many a firm has laid aside to another year plans for expansion or modernization.

The caution is healthy. It has every packer and every supplier on his mettle to come up with better methods of production and packaging. And for the longer look ahead, no one in the West doubts that this rich agricultural empire will again pick up the forward

Indeed, the West itself continues to grow in population and in supporting industries. Federal Government estimates of population growth during the rest of this decade make the West Coast rate of growth tops for the nation. And Western families continue to rate better than average in income and in standard of living.

Department of Commerce figures,

for example, show per capita income in the U.S. at \$1,436 in 1950, up 8.8% in a year. But in California, average per capita income was \$1.751, up 10% for the year, to stand 22% above the national average. Washington's per capita income was \$1,642, for a gain of 12%, and Oregon's was \$1,523, up 10%. These figures show not only that the West Coast is above the national average in family income, but also that the West Coast is increasing its lead.

More people with more money mean bigger markets—a fact of far-reaching implications. It means, for example, continued growth of plants in the Far West to turn out consumer goods and industrial materials for the near-by markets. Growth feeds upon growth.

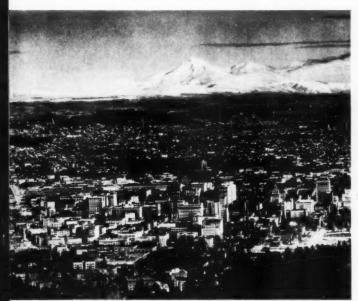
To some small extent, the growth of consumer markets in the Far West helps the food-processing industry in that region. But the big market for Western canners, freezers and driers has always been east of the Rockies and to that region the Western packer still looks for his outlets.

Agriculture as a whole is the largest single industry in the West. In the 11 Western states, farmers' cash receipts last year were just a trifle under \$6 billion. Almost half of this farm income was in California, where the total came to \$2.6 billion.

And agriculture is getting a new lift in the Far West. Increased use of nitrogen fertilizers is building yields. And new lands are coming into production, first in the central valley of California and now in the Columbia Basin of central Washington. A half-million rich acres, now too dry to farm, will be brought into production over the next seven years in the Columbia Basin. Water for this project is taken from the Columbia River back of Grand Coulee dam and flowed to the first irrigated lands during this year.

Nearly a thousand new farms a year will be brought in for the rest of this decade. Among major crops to be grown will be sweet corn and peas for freezing and dry beans—all requiring packaging.

Rich irrigated lands of central California and the Yakima Valley in Washington, the highly developed Willamette Valley in Oregon and the Blue Mountain pea area of the Pacific Northwest are big suppliers of canned and frozen foods. This is readily seen



GROWING CENTER of packaging supply is Portland, Ore. This city has become a distribution center for a large part of the production of the Pacific Northwest area, reaching out through the state of Oregon, into Idaho and Washington. This air view shows Mt. Hood in the distance.

from production figures. The West Coast states account for only a little more than 10% of U.S. farm income, yet they produce 46% of the nation's frozen fruits and 60% of the nation's frozen vegetables. They produce 74% of the nation's dried fruits, 63% of dry edible beans and 98% of dry edible peas. Comparatively little of this rich Western food crop goes to market as fresh, non-packaged produce; the Western food crop is a heavy package user.

In recent years the pack of canned fruits in the Far West has averaged close to 40 million cases; of canned vegetables, in excess of 50 million cases.

Two prime factors lie back of the growth of the Far West as the nation's provisioner of frozen and canned foods. First is mechanization. Rich land, abundant water through irrigation and broad, level fields are perfect circumstances for mechanization. Nowhere else in the country is production of food crops so highly mechanized. That cuts costs of production. It encourages establishment of large processing plants. With this development is a twin factor—high quality. Good land, good growing methods and large production under major brands have contributed to high quality and that quality has helped build markets for Western growers and processors.

A good example is the Blue Mountain region stretching across rolling hills from Pendleton, Ore., to Lewiston, Idaho, and home of 16 large-scale freezing and canning plants. Green peas are the big pack in this region and last year the 16 plants put up 17% of the nation's pack of canned peas and 30% of all frozen peas.

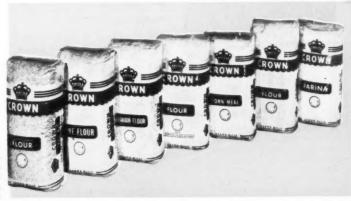
The Blue Mountain area is typical, too, of what has become the No. 1 headache and long-range worry of Western packers. That is the effect of the steady increases in the freight rates.

Freight rates have been boosted 12 times since World War II. With the exception of some "hold-downs," notably for canned foods, the increases have been percentage increases. That means that bit by bit the producer at the far end of the line, as he is in the West, finds a steadily growing differential against him and in favor of the producer nearest to major consumer markets. Even recent "hold-downs," or ceilings on percentage increases, have not afforded much relief to the canning industry.

As a result, packers of peas in the Blue Mountain region, have to quote 12 to 14 cents more per dozen cans in freight to reach Eastern markets in competition with packers in Wisconsin. The differentials are even harsher for products like strawberries, green beans, corn and tomatoes, which are heavily produced within easy trucking distance of major cities on the Eastern seaboard.

Now add in one other Western

WESTERN INGENUITY that has paid off is represented by Crown Mills' idea of packaging its specialty flours in 2-lb. duplex cellophane bags instead of paper. Sales have more than tripled.





WESTERN SPECIALTY is the mail-order gift package, accounting for millions of dollars, particularly in the Northwestern fruit belt. Package of wild-game products sent out by Samuel Martin Game Farm, Seattle, is decorated with a cock pheasant tail feather and wild turkey plume.

handicap: high wages. In the Pacific Northwest, cannery labor averages 50 cents an hour higher than in Wisconsin and Minnesota—another burden which must be offset, if possible, by more efficient operation and better quality.

Freight-rate increases have stimu-



SEARCH FOR ECONOMY in frozen-food industry led to this money-saving idea of substituting polyethylene-coated paper liner for 47-lb. laminated glassine in cartons to bulk-store frozen vegetables for future packaging.

lated planting of new acreage in the East and Midwest and have held down expansion of processing plants in the West. A glance at figures on strawberry acreage shows this. While Washington and Oregon, producing the top-quality Marshall strawberry for freezing, have been boosting their acreage in recent years, Michigan has been pushing ahead even faster. Washington and Oregon together have 27,000 acres this year, up 42% from the 10-year average. But Michigan has 14,700 acres, up 88%.

The problem of Western freezers and canners throws a new challenge to producers of packaging equipment and supplies. What can they contribute to large-scale operators to help them cut costs and strengthen markets?

The answer is being sought from many directions.

Produce is big

Pre-packaging of fresh produce and of some dry cereals is another story altogether. In many ways, this is the hottest market in the West Coast packaging business today. And the incentive is plain: to cut costs.

Handling of produce is the last major bottleneck in self-service markets today. Pre-packaging breaks that bottleneck. It speeds the customer at the point where the produce is picked up. It speeds movement through the check-out stands, where weighing is no longer necessary. It increases retail store earnings per square foot. And it eliminates spoilage and waste, a costly aspect of conventional retailing of fresh produce.*

Wholesalers have been reluctant to take on packaging of produce, but the pattern is gradually emerging: packaging should be done as near to the consumer as is necessary to guarantee delivery of sound produce in good condition. The point of packaging will thus vary. For potatoes, the job can be done in the growing area. For tomatoes, where ripening rooms are necessary, packaging must be done in consumer areas, within a day or so of distribution to the retail stores. Products like spinach, salad mix and apples may be put up in film at wholesale plants.

California got the jump on this type of packaging on the West Coast. Washington and Oregon are picking up fast, now, though there is still reluctance on the part of wholesalers to take over the job. One major supplier, typically, approaches the wholesaler through his retail-store outlet, packaging and demonstrating at the store itself to show that consumers prefer vegetables ready-packed, ready-weighed and clean.

Carrots—one product easily packaged at the producing center—have been handled in volume out of California. Early this year suppliers estimated that 40 million retail-size polyethylene bags were sold in California last year for packing carrots.

Apple growers and shippers of the Pacific Northwest have been comparitively slow to go to pre-packaging, preferring to continue to ship in the conventional 40-lb. box. But there are indications now that major brand-name shippers may be forced to arrange with contract packers at strategic cities in the East to bag for retail outlets, or to do the bagging themselves at Eastern points. Unless they do so, it is considered possible that their brand names will be lost with the consumer as jobbers get into packaging themselves. Because of a short apple pack in Washington in 1951, little progress was made last year toward developing new marketing methods

Packaging of produce in the West is developing this shift: While a number of independent packers established good volume specializing in packs like tomatoes (the most notable in the Northwest being Wesley Craw-

[•] For a Western slant on pre-packaging, see "Pre-Packaging for Quality," p. 127, this issue.

ford at Tacoma, Wash.), jobbers gradually are getting into the act and are placing their brand names on the consumer packages. As a result, a number of independent packers are now operating on a contract basis for various wholesale houses, packing to the brand names of those houses.

Another West Coast packaging development of significance is the more colorful handling of consumer packaging of dry cereais in film, generally cellophane. A typical example is that of Crown Mills, Portland, Ore., now a subsidiary of Centennial Flouring Mills Co., Seattle.

Crown reported that for a number of years it had packed a line of 2-lb. flour in paper sacks, but volume was so small that the company was considering discontinuing it. It experimented with duplex cellophane until it was no longer concerned with shelf breakage in grocery stores. Reporting for Crown Mills, D. A. MacGregor summed up:

"We became sold on cellophane as we continued our experiments. However, the immediate acceptance by the wholesale and retail grocery trade astonished us, particularly considering today's resistance against new lines of merchandise.

"The success of our new cello-package is due to today's consumers' preference to purchasing products that they cannot only feel, but see. The volume of our new line after three months on the market has increased our sales many times over and is continuing to grow."

Typical of those getting good results from this type of packaging, Crown uses multiple colors on the label, printed directly on the film, to provide at once a family unit with color distinction according to individual product. The result is a strong display on the retail shelf.

Suppliers are expanding

Western suppliers of packaging materials continue to expand. Underlying the expansion is the basic fact that on some types of materials, such as cellophane, all the material used has to be hauled to the West Coast from manufacturing plants of the Midwest, East or South.

At the present time there is no cellophane production west of Iowa. Yet the major raw material of cellophane-cellulose pulp-is produced in Washington and Oregon, and West Coast plants now consume approxi-

mately 30,000 tons of cellophane a year, a recent study by the Seattle Chamber of Commerce shows. Assuming that all of this were shipped from the nearest plant, at Clinton, Iowa, the freight bill alone would exceed \$1.7 million, the study reports. It is known that at least one major producer has been looking over West Coast sites for a cellophane plant.

Continental Can Co. broke ground in late May for its first plant in Western Canada, located at Vancouver, B.C. The plant will manufacture primarily cans for food, now supplied out of Eastern Canada. The plant is symbolic of the rapid industrial growth of British Columbia, now a boom spot on the West Coast, and of increased production of canned foods in the province.

American Can Co. recently began operation of a major plant at Stockton, Calif., with output scheduled roughly at 400 million cans a year. A similar plant has gone in at Wilmington, Calif., supplying primarily the tuna and sardine industry.

Both can companies are producing a substantial number of 11-oz. cans for frozen strawberries, a relatively new development in which a half-dozen Northwest packers are participating this year to learn market acceptance. The can permits rapid filling and sealing, and provides a smaller package, holding 10% oz. net, that brings the consumer price down to a figure where sales are expected to respond. The use of the metal can for this package, in place of either the

composite metal-fibre can or a folding box, is one more indication that the frozen-foods industry has not yet standardized on retail containers.

American Can Co, in February opened a complete plant at Portland, Ore., manufacturing paper milk containers to supply dairies in the Pacific Northwest. Capacity is 200 million containers a year.

Pacific Pulp Molding Co. (formerly the Friday Pack Corp.) is operating in a new plant outside Wenatchee, Wash., producing molded apple trays for packing boxed apples.

Central States Paper & Bag Co. opened its first plant on the West Coast this spring at Auburn, Wash., producing film bags, carton liners and specialty bags for products such as furniture. St. Regis Paper Co. has opened a new bag plant at Tacoma, Wash.

Little is being done this year in the way of new label designs for canned or frozen foods. With margins tight, the tendency of packers is to use up present stocks and to hold back on money for development of new labels. But of those labels where new designs are made, the trend now is back from one-panel labels to two-panel. In place of a recipe on the back of the label, it is more common, a survey shows, for the packer to repeat his brand name on the back so that the name is sure to show however the can goes onto the retail shelf.

But in this uncertain year of 1952, it may be said that the West Coast is more than ever packaging conscious.





Western Show

LOS ANGELES IS READY FOR AUG. 12 OPENING, WITH A RECORD

NUMBER OF EXHIBITORS AND A UNIVERSITY-CONDUCTED PROGRAM

ounting interest in packaging in M ounting interest in producted in the Western States is reflected in a record-breaking number of exhibits scheduled for the Fourth Western Packaging & Materials Handling Exposition to be held in the Shrine Convention Hall, Los Angeles, Aug. 12

At press time, the number of exhibitors had reached 132 and the Exposition sponsors, Clapp & Poliak, Inc., were predicting that the final total would be close to 200.

Thus the Western show, which draws only on the 11 states west of the Rockies, has grown to be nearly half as big as the average National Packaging Exposition.

The first three Western shows were held annually in San Francisco, starting in 1948 and averaged around 110 exhibitors, with attendance ranging from 5,000 to 7,000. An outgrowth of the second show was the formation of the Western Packaging Assn., which provides an advisory council for the Exposition and assists with the conference program. After a lapse of one year, the show was moved for this year to Los Angeles, headquarters of the Western Packaging Assn., and it is expected that henceforth it will alternate between the two cities.

The new location makes it difficult to predict attendance, but from all indications the show will draw, as in the past, from all the Western states, in addition to the heavy industrial concentration in the Los Angeles area and attendance records may very well be broken.

Exposition hours will be from 1 to 8 p.m. on Tuesday, the opening day, from 1 to 10 p.m. on Wednesday and from 1 to 5 p.m. on Thursday.

Exhibit space has expanded beyond the limits of the Shrine Convention Hall itself and will include a large outdoor area, making possible for the first time the demonstration of heavy mobile materials-handling equipment. Exhibit space within the hall will occupy the entire ground floor and the

mezzanine which completely surrounds

Exhibitors and locations are identified on the opposite page.

Conference program

For the first time at any packaging show, the concurrent conference will be conducted on a university level. The entire program will be devoted to a Packaging and Materials Handling Institute to be conducted by the Industrial Engineering Department of the University of Southern California on the university campus close to the convention hall.

Sessions of the Institute will be held from 8:30 a.m. to 12 noon on Wednesday and Thursday, Aug. 13 and 14, in Founder's Hall, on W. 34th St., under the direction of John R. Huffman, Associate Professor of Industrial Engineering. There will be a registration fee of \$7.50 for the two sessions, or \$4 for one.

The objective of the Institute, according to Mr. Huffman, is to serve as a vehicle for a direct, practical approach to the problems in the fields of both packaging and materials handling that are being faced daily by all types of industrial and agricultural produc-

It will feature the newest uses of the newest types of equipment, together with the results of their actual successful employment in various industrial fields

Part of the discussions will be devoted to the most advanced theories by men of unquestioned authority in the industry. Part will be devoted to panel studies of actual and specific handling problems and part to workshop ses-

The general subject for the Wednesday morning session will be "Packaging with Emphasis on Military Packaging Specifications," with Raymond Pass. Chief of the Packaging Section, Air Materiel Command, Los Angeles, as chairman. Panel discussions will include the following:

1. How to consider packaging when bidding contracts.

2. Case study in designing packages to comply with specifications.

On Thursday the subject will be "Specific Techniques for Solving Materials Handling Problems." C. A. Bogenrief, Chief Industrial Engineer, Grayson Controls Division of the Robertshaw Fulton Corp., as chairman will lead panel discussions of:

1. Time-saving techniques for determining number of workers for a joblot shop.

2. Traffic pattern methods for locating departments and machines to reduce handling.

3. Workshop sessions on problems dealing with fork trucks, conveyors and overhead handling equipment in small businesses.

4. Problems dealing with transition from mobile to conveyorized handling.

Appealing for widespread attendance, Fred Todt, president of the Western Packaging Assn., declares that "a great many of our Western packaging problems have proved so different from those of the rest of the country that we have had to forget the generally accepted standard methods and develop completely new ones. In many cases we have created completely unorthodox methods of packaging and handling our products for market. You will find many packaging operations in the West which have never been thought of in the East. Hence we always have the interest of experimental processes in our Western packaging industry."

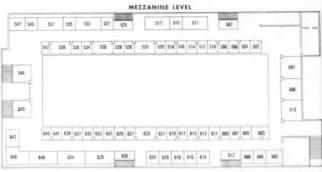
Kenneth K. Dean is general chairman for the Exposition with an Advisory Board which is composed of Peter D. Bowley, Robert H. Braun, William de Back, George T. Duffin, Rene Gaubert, R. L. Golden, Peter L. Heguy, Hugh W. Hicks, William H. Jaenicke, R. L. Jorgenson, F. R. Loetterle, C. Plin Mears, Francis X. Mohan, J. B. Post, Joseph L. Sherk, E. H. Southwell, Spencer Tilden, Fred Todt

and J. Dwight Tudor.

NAMES and LOCATIONS of EXHIBITORS

Acme Steel Co.	134	
Aerol Co., Inc.	603	12-2-9-0
Air Mac, Inc.	544	139 133
Allegheny Steel Band Co.	618	141
American Partition Corp.	627	
American Type Founders Sales Corp.	517 122	140 134 132
Ames Harris Neville Co. Andre Paper Box Co.	202	239 233
Arabol Mfg. Co.	130	241
Archer Label Co.	118	
Automatic Web Control Mfg. Co.	340	
Avery Adhesive Label Corp.	407	232
Barrett-Cravens Co.	628	
Bemis Bro. Bag Co.	224	341 0 340 332
Better Packages, Inc.	326	439 437 435 433
Big Joe Mfg. Co. Billard, W. T., Inc.	442 208	the state of the s
Biner-Ellison Machinery Co.	241	442
Bowley, Peter D., & Associates	313	432
Bronco Rubber Products Co.	405	
Buda Co.	544	
Butcher, L. H., Co.	512	
Cargo Packers, Inc.	437	547 543 537 535 53
Chaffee, Ralph, & Co.	108	
Clark Equipment Co.	232	F 0 0 1
Codie-Kay Co., Inc.	612	542 538 536 534
Continental Can Co., Inc.	223	
Coseco	629	
Cost Reduction Equipment Co.	442	544
Crocker Co., H. S., Inc. Cushman Motor Scooter	106 641	
Daher Co., Holland Box Div.	520	
Derby Sealers, Inc.	209	£45
Dispense-A-Labels Devices	605	Park .
Dobeckmum Co.	213	
Dolliver & Bro.	112	647 643 641 639 637 63
Durethene Corp.	609	
Eastman Kodak Co.	332	646 640 634
Ebert, Ray T., Co.	302	
Eldon Mfg. Co.	515	
Elliott Mfg. Co. 631	, 633	
Exact Weight Scale Co.	214	Mantes, T. R., Co.
Extruders, Inc.	514	Marathon Corp. Marsh Stencil Machine C
Fairbairn Tape & Label Co., Inc.	328	Matson Navigation Co.
Fairchilds, Inc.	504	McKay-Davis Chemical Co
Fishbein, Dave, Co.	526	McKinley Equipment Co.
Flintkote Co.	225	Mehl Mfg. Co.
Food Machinery & Chemical Corp. Fulton Bag & Cotton Mills	432 535	Modern Containers, Inc.
		MODERN PACKAGING Monsanto Chemical Co.
Garff, Ken, Sales	604	Moore, Kenneth J., & C
Gerrard, A. J., & Co. Globe Heat-Seal, Inc.	116 124	Motorola Inc.
Good Packaging	215	Multistamp Co.
Goodyear Tire & Rubber Co., Inc.	230	Mutual Plastic Mold
Gottscho, Adolph, Inc.	128	Mystik Tape Products of
Greenwood Packaging Supply Co.	531	Nashua Package Sealing
Hale, James C., Co.	634	Nasko Machinery Corp.
Hamerslag Equipment Co.	227	National Adhesives
Hampton Mfg. Co.	527	National Bundle Tyer Co.
Harco Industries, Inc.	643	National Metal Edge Box New Jersey Machine Corp
Hayssen Mfg. Co.	301	Noland Paper Co., Inc.
Higgins, W. L., Co., Inc.	421	
Hilker Products	620	Oliver Machinery Co.
I. D. Co., Fancy Container Div.	330	Pacific Coast Foil Co.
Ideal Stencil Machine Co.	132	Pacific Steelfiber Drums,
International Paper Co.	417	Paonessa, Bud Perin, Ira G., Co.
Kaiser Aluminum & Chemical Sales, Inc.	315	Potdevin Machine Co., In
Kimberly-Clark Corp.	201	Powers Wire Products Co.
King & Anderson	537	
King Sales & Engineering Co	422	Rapids-Standard Co., Inc.
Macaulas Engineering Co.	610	Reeves Pulley Co., Inc.
Macaulay Engineering Co. Machinery Mfg, Co., Inc.	612 308	Reynolds Metals Co. Rheem Mfg. Co.
Mailler Searles, Inc.	301	Richards-Wilcox Mfg. Co.
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	214	Schooler Mfc Co	415
Mantes, T. R., Co.	239		620
Marathon Corp.			320
Marsh Stencil Machine Co.	430		435
Matson Navigation Co.	420		
McKay-Davis Chemical Corp.	416 615		525
McKinley Equipment Co.			518
Mehl Mfg. Co.	623		511
Modern Containers, Inc.	233		602
MODERN PACKAGING	406		530
Monsanto Chemical Co.	141		103
Moore, Kenneth J., & Co.	542		547
Motorola Inc.	133	Strong Cobb & Co., Inc.	416
Multistamp Co.	639		
Mutual Plastic Mold	611		624
Mystik Tape Products of Calif.	543		314
			113
Nashua Package Sealing	621	Transparent Wrap Machine Corp. 634,	
Nasko Machinery Corp.	140	Twombly, C. E., Co.	402
National Adhesives	322		
National Bundle Tyer Co.	439		640
National Metal Edge Box Co.	229	U. S. Printing & Lithograph Co.	220
New Jersey Machine Corp.	308	Upressit Products Corp.	219
Noland Paper Co., Inc.	401		
Oliver Machinery Co.	429	Varigraph Co., Inc.	534
	410	Weber Addressing Machine Co.	120
Pacific Coast Foil Co.	412	West Coast Plastic Distributors, Inc.	620
Pacific Steelfiber Drums, Inc.	433	Western Lithograph Co.	139
Paonessa, Bud	614	Western Package Products Co.	102
Perin, Ira G., Co.	329	Western Waxed Paper	110
Potdevin Machine Co., Inc.	126	Woerz Paste & Gum Co.	616
Powers Wire Products Co., Inc.	626	Wolverine Paper Converting Machinery Corp.	140
Rapids-Standard Co., Inc.	423	Wood Conversion Co.	524
Reeves Pulley Co., Inc.	645	77 0004 2004 2004 2007	
Reynolds Metals Co.	411	Yale & Towne Mfg. Co.	341
Rheem Mfg. Co.	613		
Richards-Wilcox Mfg. Co.	646	Zellerbach Paper Co. 536, 538,	540



PLASTICS SUCCESS STORY

PRACTICABILITY OF DIAMOND WALNUT'S MOLDED

POLYSTYRENE JAR IS PROVED BY A YEAR'S USE

NOT GLASS, but injection-molded polystyrene is used for this handsome jar, which meets Diamond's requirements for visibility plus vacuum sealing plus light shipping weight plus rigid non-shatterability. This plastic container is readily vacuum sealed and handled on conventional high-speed closing units.

California provides the interesting story of a molded plastic package which has met and defeated—on equal terms, on a sheer basis of practicability—the conventional, low-cost, food-canning materials: tin and glass.

When the California Walnut Growers Assn., Los Angeles, introduced over a year ago its injection-molded polystyrene jar package for 4 oz. of Diamond brand walnut meats*, there were many who wondered whether this obviously more expensive container could justify itself, in opposition to the standard glass food jar which-at a glance-it so closely resembled. It appeared to violate the accepted rule that plastic materials should be used only when something could be accomplished with them that could not be accomplished, packagewise, with less-costly ma-

Those who jumped to this conclusion failed to take into consideration the special characteristics of this product and its special situation, in that it demanded complete transpar-

See Modern Packaging, June, 1951, p. 89.



GENERAL VIEW of compact packaging set-up at California Walnut Growers' Los Angeles plant, where 18,000 plastic jars are packed daily.



FILLING is manually controlled from two of these single-head net-weight filling units.

ency of package for sales appeal in today's market; demanded rigid, vacuum packaging and yet, in nationwide distribution from California, could hardly afford the shipping weight and breakage hazard of the conventional glass jar.

Because of the extremely light weight of the walnut meats, the package-weight question was allimportant: the company n ight find itself paying freight on 6½ oz. of glass to convey 4 oz. of walnuts. Because walnut meats are a relatively expensive food item-the 4 oz. package retailing for around 39 cents-breakage in transit could be very costly.

On these two points alone, California Walnut Growers has found that the plastic jar-virtually shatterproof and weighing a mere 1% oz .pays its way. It is currently packing and shipping some 28,000 daily.

Nature gave the walnut a highly protective shell. But, stripped of that shell, the walnut meat is apt to absorb odors and may turn rancid on the grocer's shelf. For years the cooperative California Walnut Growers' Assn., biggest U. S. distributor and packer of walnuts, had been trying to lick rancidity, yet come up with a package that would visually display its two top-grade meats, Diamond and Emerald brands

Sale of shelled walnuts became an economic necessity for the growers back in 1915. Although the California Walnut Growers carefully screened the crops of their thousands of grower-members, some walnuts, while perfectly sound inside the

shell, didn't have customer appeal outside. Growers called them "culls" an uncomplimentary name for a first-grade walnut whose only sin was a drab, unmerchandisable outer shell. So in 1915 the Association began to shell these "culls" and to pack them. By 1919, what had started as an orphan in the walnut industry had set a new pattern. Consumers demanded shelled walnuts. In 1919 the vacuum tin was adopted, in two standard sizes, 3 and 8 oz.

Until March, 1951, the shelled walnut remained shut off from public view in a can. Its penchant for absorbing odors and for turning rancid ruled out flexible transparent packages, such as were used for nut meats of other types. Even the vacuumized flexible package offered no solution, for walnut meats are particularly subject to breakage-and the public will not accept them broken.

One of the urgent reasons for finding a practical transparent container was that the customer wanted to be able to see the walnuts and determine for herself whether or not they

were large and whole,

Obviously, what was needed was a transparent container that could be vacuum sealed. Glass was considered briefly and discarded for the special reasons mentioned above. Plastic would not be practical unless it could readily be vacuum sealed and, furthermore, handled on conventional high-speed closing equipment.

The Walnut Growers' search coincided with research, directed to that very end, which for some time had

been carried on by a Los Angeles plastics molder. After numerous experiments it was discovered that the conventional vacuum-type, pryoff metal lid would work just as well on a plastic jar, shaped and finished like glass, as on glass itself. Use of high-impact-strength polystyrene and special molding techniques obviated any difficulty in handling on regular glass-packing and -sealing lines.

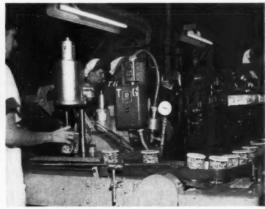
Today, with a single packaging line currently in operation, the association is turning out 1,200 cases of plasticpackaged walnuts daily. Each case, containing 24 jars that measure 3% in. high and 2% in. in diameter at the lip, weighs but 10% lbs. The same product similarly packaged in glass, the association found, would weigh approximately 17% lbs.

Already the association has observed a definite uptrend in shelledwalnut sales, attributable to the new container. Although she may not, at first glance, be aware that the jar is anything other than glass, the housewife appears to like the light and pleasant feel of the plastic, as well as the complete visibility of the product that it provides. And, as she empties the jar at home, she finds printed on the reverse side of the paper label: "This JAR CAN BE RE-USED! To remove label: soak jar in lukewarm water; peel off paper. Remove remaining adhesive by rubbing with a cloth dampened with rubbing alcohol. Do not scrape. . . ."

The plastic container also has helped the packers over the tin shortage, although actually its use is still



WEIGHT IS ADJUSTED to exact 4 oz. on a shadowtype under-and-over scales. The line has four of these.



VACUUM CAPPER, of same type used on glass lines, is capable of a 26-in. pull. Belt moves jars on to labeler at right.



THERMOPLASTIC LABELING machine neatly applies the single spot paper label near the base of each plastic jar. This gives a clean, firm and perfectly positioned application.



FOUR AT A TIME, filled, sealed and labeled jars go back into compartmented shipping cases in which they came from molder.

too limited to be classed as a largepercentage pack, considering that the association, which packs and markets 85% of the U.S. walnut crop, handles more than 60.000 tons annually.

Any possible difficulty in adhering a paper label to the plastic surface is obviated by using a thermoplastic, no-glue label, which gives a clean, firm, perfectly positioned application.

The plastic jar is molded with a slightly raised, knurled border at the base, against which the narrow band label seats, leaving about two-thirds of the jar area open to view in the front and complete visibility in the back, as the label does not continue all the way around. The five-color label (yellow, blue, black and red printed on white) carries the familiar Diamond name in white on the diamond-shaped red trademark. The body of the label is blue and the border yellow, with a narrow white separation. The jar cap is plain yellow enameled.

Here's how the packaging line operates at California Walnut Growers' big Los Angeles plant:

Shelled walnuts are fed into twin hoppers and are belt-conveyed into gravity bins atop two net-weight fillers. A girl sits at each filling machine, holds a polystyrene jar beneath the filling spigot, then places the filled container on the conveyor line. Next, the container passes to one of four shadow-type scales, where girls add or remove walnuts to come within the 4-oz. net-weight requirement. The weighed and adjusted containers next move to one of two conventional vacuumizing and capping machines. These are the older, 26-in. vacuumpuller models, with 13.5 p.s.i. on the container-which force is required because the walnut pack is loose and filled with voids, and not solid as with some other products. The sealed containers move to the semi-automatic thermoplastic labeling machine and then are taken up four at a time and cartoned upside-down in cell-type corrugated shippers.

The plastics molder has adopted the glass-makers' practice of supplying jars in shipping containers printed with the packer's label, so that jars are simply removed, filled and replaced in the same containers ready for shipment.

Despite the high vacuum pulled on

the jar, no particular trouble with "leakers" has been experienced in 16 months. According to Production Manager C. V. Newton, the incidence of leakers is the same as the normal expectancy for a glass jar similarly sealed. The breakage of the plastic jar is practically nil, Mr. Newton says, and that which does occur, because of accidental crushing of a case, is not serious because the polystyrene is non-shattering.

Thus has the molded plastic container progressed from a novelty to a workaday, production-line package.

CREDITS: Polystyrene jars molded by Southern California Plastic Co., 1805 Flower St., Glendale 1, Calif., using Dow's "Styron" polystyrene. Caps and vacuumizing-capping machines, White Cap Co., 1819 N. Major Ave., Chicago 39. Thermoplastic labels supplied by H. S. Crocker Co., Inc., 1000 San Mateo Ave., San Bruno, Calif., and applied by "Pony Label-Dri" machine manufactured by New Jersey Machine Corp., 16th St. & Willow Ave., Hoboken, N. J. Filling machines, Codie-Kay Co., Inc., 1139 San Julian St., Los Angeles 15. "Shadowgraph" scales, The Exact Weight Scale Co., 914 W. Fifth Ave., Columbus 8, Ohio.

PRE-PACKAGING FOR QUALITY

THAT'S THE AIM OF SAFEWAY'S BIG NORTHWESTERN PLANT AT

Consumer packaging of fresh vegetables and fruits for Safeway Stores in Oregon places one consideration above all others: control of quality. This is the dominant consideration in the location and operation

of the pre-packaging plant.

The plant is operated by Rexford Pre-pakt Co., at Portland, Ore., as a division of the Safeway Stores. It opened on an experimental basis in March, 1950, quickly became estab-

lished on a continuing basis and now

is in its second full season.

The big item at the Rexford plant is potatoes, which alone account for 50 to 60% of volume. Other items include onions, apples, tomatoes, spinach, oranges and celery hearts.

If you were to sum up in a paragraph the thinking back of the Rexford operation, you would have something like this: Pre-packaging helps build volume and faster handling in self-service food stores. For this, you need first of all a package that will attract the consumer. You need also to deliver consistent quality that will build consumer confidence. Every item in the consumer package—every potato or apple or onion—must be the same quality that the consumer would pick out of a mass display if she were helping herself.

Expressed another way, the handling of potatoes was put thus: "You have to provide the U.S. No. 1 grade spuds that the consumer would pick out of the No. 1 bin and not the No. 1

spuds she would leave."

That is the key to Rexford's handling of potatoes and virtually every potato sold in Safeway Stores in Rexford's Portland territory—in Oregon and Southwestern Washington—goes through the Rexford plant.

Handling of potatoes

Potatoes are bought by the carload and unloaded directly in 100-lb. sacks from the railroad car into the Rexford plant, Only U.S. No. 1 grade is bought. These potatoes generally



RESULTS of packaging at Safeway's Mexford division plant reflect the rule that every item in every package must be of the same quality that the consumer herself would pick from produce in a bulk display.

range in size from 4 to 16 oz. Except in summer, when early varieties are on the market, they are Russets or Netted Gems, such as are produced heavily in central Oregon and Southern Idaho.

Potatoes are dumped from sacks into a washing machine, where they ride on rubber rollers and are washed by spray. From here they go through a sizing unit. Those under 4 oz. drop through a 2-in. screen onto a belt and are carried off for packing as No. 2s or for dumping as culls. Those larger than 4 oz. continue on a broad belt to the grading and sorting section of the line, where women pick out all potatoes that are cut, bruised, decayed or in any other way undesirable for packaging.

Grading is necessary because even U.S. No. 1 potatoes are allowed a tolerance of 11% in grower shipment. In effect, what Rexford does is to eliminate the tolerance. Some potatoes so eliminated can be put up as No. 2s. The rest are sold as cattle feed.

From the grading unit, the washed No. 1 potatoes go through a rubberroll sizer, dividing the supply line into two sizes—those 4 to 8 oz. each and those weighing 9 to 12 oz. Those over 12 oz. are lifted by hand and blended back into the first group. A moving belt for each of these two sizes carries the potatoes to the bagging operation. Each belt has six filling positions using automatic weighers. Women filling the bags place the filled bags on another moving belt leading to the closing machine.

One innovation at Rexford is a return belt for those potatoes which may go past all six bagging positions without being loaded into a sack. Instead of piling up at the end of the filling line, the potatoes are conveyed onto a belt moving in the opposite direction and returned to the starting point of the bagging operation. This makes for a more flexible operation in bagging, with less down time.

Rexford uses both kraft and mesh bags in 10-lb. size for potatoes. The

TOMATOES



HAND OPERATIONS insure proper selection and care of tomatoes. As they move on lower conveyor from left, girls sort them into boxes according to four grades of ripeness.



OVERWRAPPED TRAYS of either three or four tomatoes—depending on size—move from wrapping machine at left directly into shipping boxes.

LEAFY VEGETABLES

SORTING LINE carefully picks over spinach to remove any off grade. Belt carries good leaves into wash tanks in foreground.



PRINTED BAGS receive the washed and drained spinach after it has been weighed on a combination scoop and filling funnel.

CELERY is trimmed and banded, then placed on a metal-web belt which carries it through the same washing machine used for spinach.



kraft bags after filling are put through a sewing machine for closing; the date of packing is hand stamped on the bottom of the bag before filling to assure consistent turnover in the retail store. Mesh bags are closed with a conventional stapler. Ten-pound bags are then loaded into shipping containers, six to a container. Containers are handled entirely by pallets and can be stacked without affecting the contents since the entire weight is born by the shipping containers. These containers are returned from retail stores for re-use.

Rexford uses nothing smaller than the 10-lb. size for potatoes. The 5-lb. bag was found to be less practical, since packing costs were about the same as for a 10-lb. size. From the consumer point of view, it was felt that the 5-lb. bag was too small.

Three different packs of potatoes are put up in the 10-lb. size. One, called the Economy Pack, contains U.S. No. 1 potatoes ranging in size from 4 to 10 oz. each, packed in double-wall kraft bags. The second. called Waldorf Size A, contains U.S. No. 1 potatoes ranging in size from 4 to 14 oz. each, also packed in kraft bags. The third, called Waldorf Premium, contains U.S. No. 1 potatoes in size from 8 to 12 oz. each; these are packed in mesh bags to set them off from the other two packs and to show the consumer the premium sizes that she is getting. Of these three sizes, the Economy Pack accounts for roughly half the volume.

Rexford also gives the consumer a Waldorf Size A pack in a 25-lb. kraft bag. The No. 2 grade is packed only in a 50-lb. multiwall bag.

In addition to pre-packaged potatoes, Rexford puts out a hand-picked selection of No. 1 potatoes in sizes 6 to 14 oz. each for bulk display in retail stores. These are packed in wooden shipping containers, with a kraft-paper lining, 75 lbs. to the container. These are premium-priced potatoes, all of uniformly high quality. The object is to have just as fine a selection of potatoes remaining for the shopper who comes at 5 p.m. as for the one who comes at 9:30 a.m. when the bulk display has just been put up.

Rexford has experimented with two or three types of consumer packages. According to this company the kraft bag has been found the simplest and most economical. At one time it also packed the 10-lb. Waldorf Premium size in a paper bag with a mesh window. While this saved substantially in cost over the full mesh bag, the consumer acceptance was so much better for full mesh that the company went back to full mesh. However, during the summer months when new potatoes are subject to greening, Rexford packs potatoes in a kraft bag with mesh window as a matter of protection.

It is notable that, at the end of nearly two years of pre-packaging, Rexford is packing very closely to the original plan as to sizes and types of packages. Consumer acceptance is considered good and volume has been expanding.

At various times, efforts have been made to have growers or grower organizations put up consumer packages. But the experience has been that none would provide quality control such as Rexford has made the heart of its entire operation. From the retail-store point of view there is one other consideration: the nearer packaging can be done to the consumer, the tighter the control of quality. In potatoes this is of less importance than in more perishable crops, such as apples or spinach. That is one reason why Rexford also has a potato-packing operation at Shelley, Idaho, in the heart of the big Idaho potatoproducing area. But where a single bad apple or bad spinach leaf in a package will hurt consumer acceptance of pre-packaging, packing just prior to delivery to retail stores has a strong advantage.

Rexford's handling of onions follows

closely the pattern of potatoes. A mesh bag is used in 5-lb. and 10-lb. sizes. In winter, when consumers buy onions more heavily and when keeping quality is better, the 10-lb. size dominates; in the spring and fall, the 5-lb. size is more popular.

As with potatoes, Rexford takes out the tolerance permitted the grower in grading and sacking onions. Any onions showing decay and those of very small size also are thrown out. The remaining onions are husked before pre-packaging. Rexford also puts up onions for bulk display at retail stores.

Tomatoes are ripened and packed in the conventional manner, using primarily overwrapped printed trays for the consumer package. Tomatoes also are packed in lugs for bulk handling at stores.

Apples and oranges are pre-packaged on the tomato line and the method of handling again shows the high degree of flexibility Rexford has built into its operation, permitting a (This article continued on page 142)

POTATOES

WASHING is the first step in handling of No. 1 grade potatoes. Rubber-fingered rollers gently rub them clean after they have passed under water jets. They leave on belt in the foreground to the grading tables.

BAGGING of graded potatoes is accomplished by automatic weighers that take 10 lbs, at a time from conveyor and release them into either mesh or paper bags.

SEWING is method used to close paper bags, after the tops are folded shut by rubber rollers, and filled bags drop off on the conveyor to the shipping cases. The mesh bags are stapled.

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2 "STREAMLINER" Model "D" case gluersealer for food, dairy and beverage operations open to public.



5 MODEL"G" top and bottom sealer for slow production lines not employing conveyors. Ideal for glass, dinnerware and lamps.



3 COMBINATION END LOADER-SIDE SEALER takes round or rectangular packages, assembles and loads them into cases previously squared and registered.



6 EXTENDED INLET CONVEYOR attached to Model D for handling cases packed directly on feed-in plate.



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One-trip drum developed with aluminum foil!



Picture shows how multiple plies of fibreboard and aluminum foil fold at the edge to form liquid-tight construction before flexible sealing compound and metal lids are applied.

An inexpensive new shipping drum that requires no deposit or return has now been perfected through the ingenious use of aluminum foil.

Developed by Pacific Steelfibre Drums, Inc., of Alhambra, California, in cooperation with Kaiser Aluminum, this container is light in weight, yet strong enough for rugged service. It replaces heavy, expensive all-steel drums for many uses.

Secret of its construction: Continuouslywound layers of strong fibreboard laminated with aluminum foil.

Tested by a major refinery for a year, these new drums gave less leakage than all-steel drums. Stacked under loads up to 3000 lbs. for 30 days, filled with SAE10-10W oil at elevated temperatures of 158° F., no failures or leakage occurred.

What's more, the fibre-foil drum almost completely eliminates big expenses of accounting, handling, reconditioning.

Cost savings vary between 10% and 25% depending upon drum size and quantity. Light weight reduces shipping costs.

Extra safety for volatile substances is assured because aluminum is non-sparking. And because aluminum is non-porous, moisture-vapor proof, corrosion resistant, the fibre-foil drum is ideal for many liquids, like paints, foods, and for hygroscopic products which must be kept dry.

Consider the advantages of versatile aluminum foil for your customers. Call any office for complete information and for current availability. Sales offices in principal cities. Kaiser Aluminum & Chemical Sales, Inc., Oakland 12, California.

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FAMILY DESIGN varies only in color of lower band: red for pink salmon, black for neutral, light blue for medium red, deep blue for Alaska red sockeye. Upper band is red and middle band white in all cases. This, with attached recipe book, is to encourage consumers to switch readily from one to another, since not all varieties are available each year.

Salmon strike

WHITNEY & CO. SOLVE SOME PROBLEMS PECULIAR TO THE FISH BY ADOPTING

ONE BASIC LABEL AND PROMOTING IT SMARTLY TO RETAILERS

Alaskan salmon packing, a major packaging operation in the Pacific Northwest, for a half-century has been an industry with focus on production. Getting salmon into cans in good quality and in greatest number during the short and unpredictable fish runs has been the big job.

But the increasing competition of other foods, notably tuna fish, is compelling a new focus. The production job is still no easier, but marketing has become an increasing concern as the costs of production have risen. As a result, some of the more progress-

sive packers are coming to recognize the need to strengthen consumer markets.

Without waiting for industry-wide action, some packers and handlers have undertaken promotion on their own. Easily the outstanding new promotion in the industry this year is that of Whitney & Co., Seattle salmon brokers, and in this promotion, packaging is one of the prime ingredients.

Whitney's first task was to redesign its labels. Here it ran into a problem characteristic of salmon packing. This is an industry with no one or two dominant packers or brands. Instead, it is an industry of hundreds of brands. Many a packer or broker has a dozen or more brands. These labels were built up through the years, a different label for each variety of salmon and, curiously, sometimes different labels for different markets. But, as the focus shifts to marketing, the number of labels is being cut down.

Whitney designed a single new label bearing the brand name "Whitney's." It made the new label in four versions, covering the four major varieties of salmon that go to market from Alaska in cans. But it made the labels a single family in appearance.

The company wanted to promote its name and it wanted to be able to swing the customer over from one variety to another, as the supply varies. And the supply does vary from year to year. Red sockeye salmon, for example, run on a four-year cycle; there's good supply, normally, in a cycle year and a much shorter supply in other years. Pink salmon run on a two-year cycle.

Whitney's felt that the consumer would be more likely to shift to different varieties if he found all of them under similar labels and the same reliable brand name.

The four labels finally developed all carry Whitney's name and the outline of a salmon plunging toward the bottom. All carry a ribbon of red around the top and a middle band of white. A wide band at the bottom changes according to variety. The premium-quality Alaska red sockeye carries a deep blue band; medium red salmon, a light blue band; pink salmon, the red band so long associated with salmon labels; and the neutral or chum salmon, a black band at the bottom. Except on the neutral label, the name of the particular variety is printed under the name Whitney's.

The same pattern is followed for the ½-lb. flat cans as for the traditional 1-lb. tall salmon can.

To make further use of the package as a merchandising medium, Whitney's prepared a recipe folder listing eight ways to serve salmon.

This is glued to the top of each can. The object is to build new uses for canned salmon and to show how housewives can prepare economical main dishes of this food. The recipe folder, the same for each can regardless of variety of salmon, handily serves another purpose—that of helping the consumer shift to whatever variety is in good supply, for the folder makes no mention of separate varieties. The recipes are good for all varieties.

Whitney's introduced its new package in four test cities at the start of the Lenten season this year: Omaha, Louisville, Huntington, W.Va., and Evansville, Ind. Newspapers, radio and television were used in the promotion. Newspapers and television emphasized Whitney's label. Typically, newspaper ads carried the slogan under the brand name, "a quality canned salmon family—under one label."

A most unusual direct-mail piece was made up for the introduction into these four markets. Here again, packaging played a key part. One object of the promotion was to build better distribution. For this purpose, Whitney's prepared a kit that would let the retailer know what was going to happen, promotion-wise, and to make clear the value to him of putting Whitney's salmon on his shelves.

The retailer kit consisted of a 1-lb. tall can bearing the label of Whitney's Alaska red sockeye salmon. The can was empty of salmon, but contained the story of the promotion—a two-color reproduction of tradepaper advertising that told of the new

Whitney's label that brings "four good grades of salmon into one quality family." It explained that "advertising support of the one distinct label will center around a well-coordinated plan of quality control build-up as well as label promotion."

Also in the can was a 4-ft. streamer and window banner, and labels for other varieties in the Whitney's line.

For mailing, the can was placed in a polyethylene bag and to this was stapled a large address label, carrying the retailer's name on one side and on the other, in large letters, the teaser: "There's only one way to find out . . . open this can!"

And from the checks Whitney's made during the 10-week introductory campaign, retailers did, indeed, open the can and find out. And they remembered! The mailing piece won first prize in the annual direct-mail competition of the Seattle Advertising and Sales Club.

The cans were mailed first class, incidentally, at 15 cents' postage each. Because the message was sealed in the tin, postal officials felt that the package was not exactly open to postal inspection, hence required first-class rate. In all, 4,300 packages were mailed.

The campaign will be extended later this year into additional markets.

CREDITS: Labels, Ridgway Lithograph Co., 1516 12th St., Seattle 22, Wash. Recipe folders, Schmidt Lithograph Co., 461 Second St., San Francisco 7. Polyethylene bags, Bemis Bro. Bag Co., 111-H N. 4th St., St. Louis 2, Mo. Cans, American Can Co., 100 Park Ave., New York.

MAILING PIECE promoting the new label to retailers. Can containing streamer, sample labels and ad reproduction was mailed first class in polyethylene bag shown at right, with "teaser" tag encouraging retailer to use his can opener to get at the contents.



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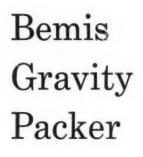
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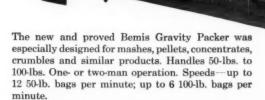
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Family of salts

LESLIE CO. GAINS STRENGTH AND UNITY BY
ADAPTING ITS CONSUMER DESIGN TO OTHER
PACKAGES FOR 40 KINDS OF CALIFORNIA SALT

PROTOTYPE for the family design was this strong and simple bright red label with white lettering and a gold line forming oval around "iodized" designation. Top and bottom of this 26-oz. paper canister are black.

 ${f F}$ or 40 miles along the southern arm of San Francisco Bay stretches the world's largest solar-evaporation saltproducing operation. There, near the town of Newark, the Leslie Salt Co. has its 40,000-acre plant. From it, in bulk carloads and shiploads and in packages ranging from % oz. to 125 lbs. come some 800,000 tons of salt a year. Leslie's distribution area includes Washington, Oregon, California, Arizona, Nevada, Hawaii, Alaska and various countries in and bordering on the Pacific Ocean. Its 40 types of salt serve a variety of industries-chemical, leather tanning, soap manufacturing, ceramic glazing, stock feeding, canning, meat packing and many more-as well as home consumers.

Most widely advertised and bestknown of Leslie's packages is its 26oz. round paper canister of table salt for home consumption. A strong-looking package with a bright red wraparound label, it more than holds its own on grocers' shelves. Within recent years a %-oz. miniature replica of the round has been placed on the market and a 1½-lb., foil-wrapped, rectangular, table-salt carton, mainly for export, has been redesigned after the standard round.

Beyond these, however, packaging has "just growed" over the years. Last year Leslie officials decided to re-examine the remainder of their line of packages and they found it to encompass half a dozen major de-

signs. Each served well enough the product for which it had originally been developed, but there was little carry-over of identity from package to package. Recognizing a need for redesigning the entire line, the company called in a San Francisco designer, who surveyed the situation.

First of all, the packages had to retain their existing structural characteristics. There could be no change which would necessitate new packaging methods or materials. These had been worked out practically in the past to the satisfaction of both Leslie plant personnel and the products' users. Redesign was, consequently, to affect only the exterior appearance of packages at present in use.

Two main purposes were to be achieved. The whole line was to be given a single identity. In place of its heterogeneous appearance, there was to be a characteristic "Leslie look" so as to leave no doubt in the eye of the beholder as to whose merchandise it was. At the same time, however, different items had to be easily distinguished. In the warehouses of the producers, the wholesalers and the retailers, workers had to be able to tell at a glance just what kind of salt each case contained.

The designer chose the well-known 26-oz., round, table-salt carton as the prototype for the "Leslie look." It is an easily identifiable container, with simple white lettering on a

bright red background and the designer felt its "solid, postery effect" could be adapted to other packages.

Leslie table salt comes either plain or iodized and the round carton for the latter carries the word "iodized" in an oval centered in the upper half of the front of the label. This oval was carried over to the newly designed packages to hold the words that would identify or help identify the types of salt-"Kiln Dried Hay" or "Kiln Dried Water Softener," for instance, on sacks. On cases, the principal identifying words were printed in the most easily seen position, above and clear of the main portion of the design, and such words as "Plain" or "Iodized" were placed in the oval. Occasionally, comparatively small quantities of certain types of salt are packaged in sacks and the identifying name is stenciled on; for these, ovals were left blank, the lettering to be stenciled inside. In addition, for easy identification, the name of the type of salt is printed or stenciled at the top and bottom of each sack, so that it can be read when the sacks are stacked.

In some of the old packages, the over-all design element was so strong that the name of the specific product was almost lost. In the new packages this flaw was corrected. Many packages had been printed in three colors—black, red and green. Green was dropped. Red became the predomi-



ADAPTATION to institutional sizes and industrial salt shows how family feeling is retained.



SHIPPING CASES for packing new packages pick up new basic design and are printed in single red color same as consumer label.

nate color, with black used for product identifying lettering.

Today the Leslie Salt Co. has a well-integrated line of containers, all plainly Leslie packages, yet all plainly distinguishable from each other. This is eminently satisfactory for both the dealer and the company's management. As a Leslie spokesman puts it, "Over the years, if you do a good packaging job, you build up something that is of value to you, that adds to the character of your company."

CREDITS: Design program, Shawl, Nyeland & Seavey, 345 Front St., San Francisco. Canisters made by Leslie of tube paper supplied by Fibreboard Products, Inc., 1789 Montgomery St., San Francisco. Labels, Muirson Label Co., Inc., Stevenson Ave., San Jose, Calif. Corrugated cartons, Longview Fibre Co., 88th Ave. and Blaine St., Oakland, Calif.; California Carton Corp., 4549 Horton St., Emeryville, Calif., and Fibreboard Products, Inc. Four- and 10-lb. paper bags (pockets), Benj. C. Betner Co., Devon, Pa. Multiwall valve bags for 50 lbs. and above, International Paper Co., Bagpak Div., 220 E. 42 St., New York 17, and St. Regis Paper Co., 230 Park Ave., New York 17.



OLD PACKAGES used various red, green and black colors and had little or no design impact as compared to new-design shipper, bottom center.

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August 12-14, 1952





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3500 cartons per hour output



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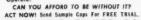
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 Adjustable Tension Device Controls Cap Tightness.

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Hermetic seal for garden soils

With a line of nine different soil or soil-conditioning products sold through chain variety stores throughout the country, Royal Earth Products Co. required a package that combined economy with sales appeal and sturdy



construction. Transparent polyethylene bags were chosen as standard for all the products, ranging from vermicultite through peat moss. The high visibility helped sales, as did the sturdy feel of the bags, which assured customers that the package was not likely to burst or dribble before it could be carried home.

Closure was made by rolling and stapling the top, then attaching a label over the bag top. The company wanted to carry the use of a film bag to its logical conclusion by heat sealing the top, but found that costs went out of bounds for thermoplastic coating.

The solution to the problem came when one of a number of heat sealers tested proved that its temperature control was precise enough to permit heat sealing of the bags' own polyethylene material. This machine is now used on semi-automatic sealing of the bags and requires neither thermoplastic-coated or other specially coated label papers; a printed polyethylene top label matching the bag's front label is merely folded over the folded bag top and the closure sealing and labeling are completed in a single controlled heat-sealing operation.

Since using the hermetically sealed bags, the company has found that the improved moisture retention in leaf mold and other humus products has caused the aging process to continue after packaging, increasing the product's value as a plant food during the interval between packaging and use.

CREDIT: Labeler-sealer, Globe Heat Seal, Inc., 3380 Robertson Blvd., Los Angeles 34.

Foil protects and brightens

A new foil overwrap has helped sales and lengthened shelf life for three varieties of the Saratoga brand dried fruits packed by Mayfair Packing Co., San Jose, Calif. The company says sales doubled in most markets. Before the change, the standard 1-lb., 11-oz. cartons had carried a lithographed paper overwrap; foil was chosen for the new wrap because company officials saw a need to "lighten up" the package.

The new aluminum foil label-over-

wrap is printed in three colors—red, blue and white—on high-speed roto-gravure presses. The design keeps the former elements to retain brand identity; foil background colors are dark copper for the apricot package, light gold for prunes and light copper for peaches. The foil overwrap is glue sealed. Stripes on the label at top and bottom carry around to form an over-all design on the back, broken by a panel containing instructions for cooking the dried fruits.





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WRITE FOR PARTICULARS

PYROXYLIN PRODUCTS, Inc.

Doughboy, etc.

WICHITA KANSAS

PAOLI PENNA.

(This article continued from page 129) shift from one product to another, depending upon the need at retail, and from one type of package to another, depending upon the consumer reaction to changing price levels.

Two styles of package have been used for apples. One is a 5-lb. Pliofilm bag. This was used in the 1950-51 apple season, when prices of apples were low and the cost of packaging material was of less importance. But in the 1951-52 season, the apple crop in the West is much smaller and prices much higher. As a result, price resistance quickly developed among consumers and to get the total cost of the package down, Rexford shifted to the open-top type of paper bag with reinforced paper carrying

The method of filling these apple bags is unusual. The first woman on the filling line opens the bag and places it empty on a moving belt. The next woman places two apples in the bag and stands it up on the belt. Each additional woman on the line adds two apples. Normally, the bag contains 10 apples, but there will be variation with the size. The process used in packaging apples is the same for oranges.

The open-top bag is particularly adaptable to oranges, which are packed mainly at the end of the season. At this time, keeping quality is more of a problem. With an open-top bag, the store manager can spot a bad orange and remove it. This consideration at Rexford virtually eliminates the use of a closed bag for

Rexford packages spinach in the conventional manner, using both cellophane and acetate printed bags, with imprinting in red, vellow and green. Packaged spinach carries the house brand name, Waldorf. Celery hearts are packaged by banding and, in season, Rexford trims green corn, but does not pre-package it.

CREDITS: Kraft bags, Crown-Willamette, Portland, Ore. Mesh bags, Chase Bag Co., 309 W. Jackson Blvd., Chicago 6. and Ames Harris Neville Co., 2800 17th St., San Francisco 10. Vent-Vu kraft meshwindow bags, Union Bag & Paper Corp., 233 Broadway, New York 7. Home-Toter open-top paper-handle bags, Package Containers, Inc., Portland, Ore. Ahlburg automatic weighers, Packers Service, 4661½ Hollywood Blvd., Los Angeles.

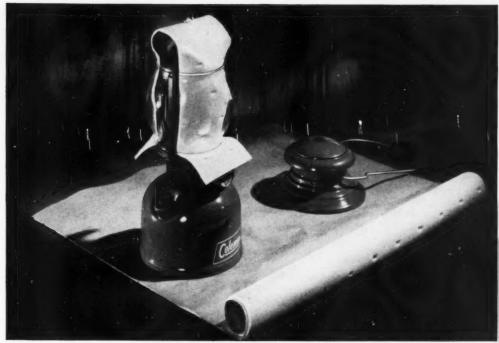


Photo courtesy of the Coleman Co., Wichita, Kansas

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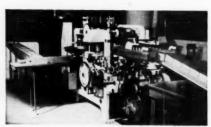


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Charles A. Southwick Jr. . Technical Editor

Organoleptic evaluation

SENSORY PANEL TESTING CAN HELP PROTECT FOOD PRODUCTS

FROM CHANGES OF AROMA AND FLAVOR IMPARTED BY PACKAGING MATERIALS.

By L. C. Cartwright* and P. H. Kelley

In the past several years, increasing emphasis has been placed on the importance of the aroma and flavor of food products. Public demand has, in many instances, forced the food manufacturer to exercise greater care and stricter control measures to insure that his product reaches the consumer without any serious deterioration in aroma and flavor.

With the end of World War II, the public began to demand better quality food products, where they had been accepting, in some instances, under emergency conditions, substandard items. With constantly decreasing dollar value in the past few years, the consuming public has been increasingly insistent upon receiving full value for each dollar. Paralleling this public demand, those in the food field have shown increasing interest in the evaluation of food products in terms of consumer acceptability, particularly as to aroma and flavor quality. Physical and chemical means for the evaluation of food palatability have been found wholly inadequate for the detection of differences in aroma and flavor which are readily apparent to the average consumer. Thus, more and more, we have been turning to organoleptic (i.e., sensory) evaluation of food products.

*Account Executive and † Director of the Product Evaluation Section, Foster D. Snell. Inc., New York, From a paper presented at the Annual Meeting of the Technical Assn. of the Pulp & Paper Industry, New York, Feb. 20, 1952.

This specialized type of flavor evaluation has long been conducted by individual expert tasters in the wine, coffee and tea industries. However, it takes years to train such experts and their evaluations are almost purely subjective, with no ready means of detecting and correcting for their not infrequent serious aberrations in aroma and flavor perception and evaluation. With the need for palatability evaluation of an increasingly wide range of food products, the organoleptic panel, consisting of a number of individuals, carefully selected and trained for evaluation of a particular type of product, has come into wide use. During the past 10 years, there have been many contributions to the technical literature in this field. The most comprehensive survey of such literature available is found in the report of the proceedings of the National Conference on Palatability Evaluation held in 1950 under the auspices of the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture, Washington, D.C. (4).†

We have used the organoleptic

† Numbers in parentheses identify "References" appended.

TYPICAL TESTING PANEL evaluating beverage for aroma, flavor. Conditioned samples of paper packaging materials are evaluated in same way.





AGING SAMPLES prior to test. Jar at left contains samples of packaging material alone; jar at right contains packaging materials plus a food product.

panel for evaluation of properties affecting sensory response for many years and have endeavored to contribute to the improvement and refinement of the method, both as a general research tool (2) and as adapted to various special problems in food formulation, packaging and other fields (1, 3, 5, 6).

With the ever-increasing number and types of packaging materials for foods, there is a definite need for the evaluation of changes in aroma and flavor which can be traced to the packaging material itself. Such aroma and flavor changes may be due to the permeability of the material to atmospheric oxygen, water vapor and/or foreign odors. Transmission of light, or lack of permeability of the packaging material to certain products formed during storage, may also cause deterioration of the food product. Pick-up of odor and flavor from the packaging material itself is often a major contributory factor in the change of food flavors. When a new package is designed for a particular food product, all factors affecting flavor must be considered (10).

In this paper, we consider mainly the pick-up of aroma and flavor from the packaging materials, rather than permeation through the packaging material. The same general principles would apply to the evaluation of aroma and flavor changes due to other properties of the package, although preparing samples for aging prior to evaluation would be altered to suit the particular problems.

Selection of samples

As for any test of packaging materials, it is essential that a representa-

tive sample be obtained. Sampling of several mill runs of the packaging material is generally desirable to assure that the aroma and flavor quality of the material can be maintained. Usually, the square root of the total number of units (rolls) is sampled, with the proviso that not less than five nor more than 25 units per lot are sampled. Variations in this procedure may be necessary, such as sampling at certain times of the day or from certain sections of a warehouse. It may be that there are certain outside factors which contribute off-odors to the packaging materials and other modifications of sampling procedure may be necessary. The nature of the problem is the basis for decision as to the exact sampling

Great care must be taken to see that the samples do not become contaminated during transfer from the source of sampling to the place of test. Such contamination requires taking of new samples. However, if it is not realized that contamination has occurred, erroneous results are obtained.

Preparation of samples

Examination of the sample before contact with a food product. Generally, as soon as a sample of packaging material is received in our laboratories, it is cut into pieces of suitable size to be stored in a clean, odorfree, screw-cap jar. The sample is thus protected from odors and any odors which the sample may have are retained in this storage jar. Sufficient quantity of the sample is stored in this manner to provide uniform samples of material for subsequent tests.

An aroma evaluation of the packaging material may be all that is required. However, in most of our work, this investigation serves as a guide only to evaluation of off-flavor development which might occur in the food product. Several methods may be used for this evaluation: The sample may be evaluated by smelling a freshly torn area, by smelling material that has been stored in jars for at least 24 hrs., or by the more rigorous tests of submersion in hot water or aging for 24 hrs. at high temperature and humidity. In many instances, however, we have actually tasted the material, chewing a portion for a few seconds.

Transfer of packaging odors to a food product. Generally, we prefer to evaluate the actual effect of the packaging material on the aroma and flavor of the particular food product which is to be packaged. Aging of packages under normal storage conditions, as they would be distributed to the consumer, and subsequent evaluation of the food, would be most desirable. However, this is not practical because of the time necessary for such tests and the multitude of test packages which would be required. Also, many packages are made of a composite of various materials and the source of an objectionable flavor could not be traced. Therefore, accelerated aging tests are conducted which can be completed in a relatively short space of time and which will allow the individual components of the package to be tested.

Correlation of the results of such accelerated aging tests with shelf-life tests is desirable but may not be es-

TABLE I—ORGANOLEPTIC EVALUATION OF PACKAGING MATERIAL FOR CHOCOLATE PRODUCTS USING 10 PANEL MEMBERS

		Total scores									
Description of sample	Max.	Min.	Mean	S.E.M.							
Unprinted inside wrapper A	95	85	90.5	±1.1							
" В	86	74	81.2	± 1.7							
" " " C	86	56	71.6	± 3.4							
Printed " " A	94	84	89.5	± 1.1							
Printed wrapper A, glued port	rion										
Glue U	92	73	81.3	± 2.0							
Glue V	92	81	89.1	+1.2							
Unprinted boxboard A	87	70	78.9	±2.3							
" " В	90	81	86.1	± 1.3							
" " C	87	79	82.9	± 1.5							
Printed boxboard B											
Ink W	87	79	82.9	± 1.2							
Ink Y	80	44	61.9	± 4.2							
Exterior wrap A	88	70	82.0	± 2.6							
er er B	86	74	81.2	±1.7							
" " C	95	86	90.2	±1.2							

sential, depending upon the food product.

Whenever it is feasible, the actual food product which is to be packaged is used as the absorption medium. This is not always possible and, where the particular food product cannot be used, foods are selected which bear a relationship to and which will absorb odors as readily as or more readily than the product to be packaged. Aging conditions will depend upon the type of food product and care should be taken to select a condition which is not too extreme. Acceleration is also obtained by using a greater proportion of packaging material per unit of food than would be found in the actual package. The packaging material can be aged in contact with the food, or in the same container without actual contact. Generally, we prefer the former.

Several methods have been reported in the literature for transfer of odors to food products. Sandwiches of high-score butter, or chocolate, and the packaging material are aged for 24 to 48 hrs. in closed glass containers at room temperature (8, 9). This allows for differentiation of the odor properties of each side of the material. Small containers to hold heavy cream can be prepared from the packaging material, covered and aged for 24 hrs. at 45 deg. F. (8). We have also used mineral oil, weak acetic acid solutions and distilled water for similar tests. Mineral oil, placed in a dish and set near the packaging material while it is aging, also picks up odors (8, 9).

In our evaluation of packaging for potato chips and flour, we have used the actual food products, aging at high humidities. Chocolate products such as candy, cocoa and prepared cocoa mix, which we have studied in relation to their packaging materials, have shown that they are particularly susceptible to absorption of odors and flavors. For such food products, the packaging material to be tested is cut into %-in. squares, mixed with five times its weight of the food, placed in clean, odor-free glass jars and stored with the cap off for a period of seven days at 100 deg. F. over a saturated solution of sodium tartrate which gives a relative humidity of 90%. However, reduction in temperature is required for chocolate candy. Separate portions of the chocolate product are aged alone to serve as an

TABLE II—DUO-TRIO TESTS FOR SELECTION OF PACKAGING MATERIAL FOR DINNER ROLLS

Packaging	No. correct	Level of	No. of preferences based on correct selection							
material	selections	significance	Control	Packaging material						
A	12	0.0001	10	2						
В	8	None	4	4						
C	10	0.01	7	3						
D	9	0.05	6	4						

aged control, since aging under these adverse conditions affects aroma and flavor. After the aging period, the product is separated from the packaging material and submitted to our organoleptic panel, together with aged and unaged controls. This test method can be extended to packaging materials which are not to be used for chocolate products, if the particular food bears some relationship to chocolate and is not suitable for accelerated aging tests.

Organoleptic evaluation

The general principles of organoleptic panel testing apply to the evaluation of food products aged in contact with packaging material and also to examination of the packaging material itself. The general methods have been covered in the literature and will not be repeated here. However, there are certain details which should be emphasized and, in our work, we have developed certain techniques which are particularly applicable to the evaluation of packaging material for aroma and flavor quality.

First, the system of evaluation of the packaging material must be decided upon. We suggest a combination of ratings and comments by the panel members. As stated previously, the evaluation of the packaging material before contact with the food product serves as a guide to the off-flavors which might be absorbed by the food product. In this examination, we rate the presence of odor as:

- 1. Just detectable
- 2. Moderate
- 3. Strong
- 4. Very strong

and request a description or identification of the odor.

Common odors found in packaging materials have been described as: cardboard, paper, sweet, ink, glue, oil, musty, turpentine, solvent, fruity, etc. For evaluation of the food product we generally use a system in which the presence of desirable notes in aroma, flavor and aftertaste,

and the absence of undesirable notes in aroma, flavor and aftertaste are scored. The total score for the unaged control sample of the food product is 100, made up of 30% for aroma, 40% for flavor and 30% for aftertaste. Aftertaste is usually very important, since off-notes encountered in foods aged with packaging material are often not apparent until the food has been swallowed or expectorated. A typical pattern of results obtained when evaluating food products by this system is as follows:

			Sample aged
			in contact with
	Unaged	Aged	packaging
Aroma	control	contro	l material
Presence of			
desirable	15	13	12
Absence of			
undesirabl	e 15	14	10
Flavor			
Presence of			
desirable	20	18	15
Absence of			
undesirabl	e 20	18	12
Aftertaste			
Presence of			
desirable	15	13	11
Absence of			
undesirabl	e 15	14	6
	-	_	-
Totals	100	90	66

For this system of evaluation, the reference sample of unaged food product serves as a guide to the panel members' evaluation, eliminating preference grading. The aged control is a check on aging conditions from one series of tests to another, since it indicates the amount of deterioration or change in the food product caused by the aging conditions and not due to the packaging material being tested.

Having selected our system of evaluation, the panel members are selected. For detection of off-aromas and off-flavors, it is possible to prepare typical samples representing various degrees of contamination. Usually, we use the duo-trio technique for initial selection. The panel (This article continued on page 201)

Question & A

This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Film pack for olive oil

QUESTION: We would like to package olive oil in a transparent film package for consumer use. So far, we have tried bags from polyethylene, but find that the oil goes through this film. We would like your suggestions on what films might be satisfactory for this application.

ANSWER: Polyethylene film is not well suited to the packaging of many fatty and oily products because oils can penetrate the film. This effect is more noticeable and occurs more quickly when thin films (in the neighborhood of 1 mil) are used, but will also occur even when much thicker gauges are used. Seepage of this type is not due to pinholes or similar types of defects in polyethylene, but is due entirely to the inability of the film to resist penetration by some oils.

There are many transparent films which are capable of resisting penctration of fats and oils, including olive oil. However, the problem of making a satisfactory flexible consumer package for olive oil is much more involved than finding a greaseproof film. First, it will be necessary to obtain a bag of simplified construction with completely liquid-tight seams. This bag or pouch will then have to be filled and a perfect closure made by heat sealing. Since there is a very good possibility that the bag or pouch will be coated on the inside with olive oil. the film must be capable of being strongly sealed through this film of oil. It might be possible to make sample packages which are satisfactory. However, because of the number of hand operations involved, it will be difficult to make such packages on a production basis, at reasonable cost. Even if such packages could be made on a sample basis, it is doubtful if they could undergo handling, shipping and the storage involved in the merchandising of olive oil. You must also consider the possibility of the film becoming brittle or affected in other ways after long periods of storage, as well as the possibility of the olive oil deteriorating in this type of package.

Odor contamination

QUESTION: One of our products is being packaged in a folding carton with a printed foil overwrap. From time to time we have received complaints of foreign odors in our product and we do not understand how such odors could penetrate the foil overwrap. We would like to know how we can use such a packaging combination without the danger of contaminating the product.

ANSWER: Odor contamination of a product in a foil-wrapped carton can come from two sources.

One possibility is the adhesive used to close the carton flaps. If excessive amounts of adhesive or an adhesive which has excessive odor is used on these flaps it will be trapped by the foil overwrap and will then be absorbed by the product. The solution to this problem is to select the adhesive very carefully for freedom from odor and to be sure that only minimum amounts of adhesive are applied to the carton flaps.

The other possible source of odor is the paperboard used in the folding carton. There are many types of carton board, some of which carry some odor, particularly if they have been stored in humid atmospheres. However, you can obtain board made from 100% new and refined pulps that will not carry odor.

With a foil overwrap, there is little or no possibility of outside odors penetrating the wrapper and contaminating your product.

Contaminated heat-seal area

QUESTION: We are trying to develop a plastic bag combination for one of our new grocery products. This particular product contains a

great deal of a specially finely ground flour. In the closing of our plastic bags we noticed a considerable difference in the seal strength of different materials and we suspect that some of these differences are due to flour getting into the heat-sealing areas. Can you suggest a plastic which will seal through such contamination or some other means of insuring a strong seal under these conditions?

ANSWER: The presence of finely divided solids on the surface of a plastic film will degrade the strength of the resulting seal, depending upon the type of film and also upon the kind and amount of contaminating material. Some films will seal through various liquids without any difficulty and effect a good weld. However, in these cases, it is presumed that the pressure of the sealing platen has forced the liquid out of the fusion area. In the case of solid contaminants, however, these cannot be similarly forced out of the sealing area and as a result they can exercise a degrading effect upon seal strength.

The best answer to your problem is to attempt to protect the sealing area by the use of longer or tighter-fitting filling tubes and perhaps by using an anti-static device on the filling tube. These precautions will help to reduce the amount of contamination, if not eliminate it entirely, and they should so reduce it that the heat-sealing operation will result in a true weld of the plastic film.

You have probably selected one or two plastic films for this product because they have certain physical and protective qualities and it would not be possible to interchange films freely simply to find one that would seal through contamination by your product at the heat-sealing area. The answer is to find a means of preventing or reducing contamination so that any plastic film which you desire to use can be heat sealed.



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"STUDYING changes and trends in consumer buying habits can point the way to better packaging. Continuing marketing studies are carried on by Du Pont, in stores across the nation. I bring you survey results . . . show you how they apply to your business."

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Equipment and materials

A NEW CLEANER FOR WOODEN SOFT-DRINK CASES

recently introduced by Standard-Knapp, Division of Emhart Mfg. Co., Portland, Conn., cleans cases automatically and is reported to effect labor savings and, by gentle handling, reduc-



tion in case cost. The unit, known as the Type 121 case cleaner, is designed to handle either partitioned cases or carton carrier cases, or an intermingling of both. It is a closed metal box with two front transparent plastic doors, requires only 19.4 ft. of floor space and may be easily incorporated into most existing bottling lines without modification. Except for infeed and

outlet areas, the unit is completely airtight, thus providing cleanliness in the plant. Being purely a type of conveyor section, it requires little maintenance. Smooth handling of the cases lengthens case life. The intake to the unit receives cases from a conveyor directly through the side of the case cleaner onto a short belt-conveyor section for infeed to the timer mechanism. The case is then engaged by flight lugs on a chain conveyor which propel the case around a spiral circle. As the case reaches the top of its travel, four air jets are timed to release compressed air blasts into the case. A metal hopper and chute in the middle of the circle collects debris and deposits it through an opening at the back of the unit. The new case cleaner has been commercially tested for six months at the Coca Cola Bottling Co., Inc., at New Haven, Conn.

A FULLY AUTOMATIC LABEL DISPENSER

will be on exhibition for the first time at the Western Packaging Show in Los Angeles, August 12, 13 and 14. Called the first of its kind, the machine has been developed and is being produced by the Archer Label Co., 97 W. Union St., Pasadena,

Calif. In operation, the dispenser feeds labels automatically as fast as they are removed by the operator. It is designed to use pressure-sensitive labels which the company provides in convenient roll form with the labels mounted either multi-ply or on individual carrying-tape rolls. Where several labels are used on each package labeled, for



on each package labeled, for example, a single full-width carrying roll would be provided with the four labels side by side; as the last label on the left is removed, the next roll would automatically be fed into position. The Archer label dispenser measures 7 in. wide by 7% in. high and is just 1 ft. long. It weighs 9 lbs. There are no adjustments to be made, the company says, and mechanical details are all reduced to simplest terms.

A VACUUM FILLER FOR POWDERS

said to eliminate lumping or caking during the filling cycle is now offered by Stokes & Smith Co., 4900 Summerdale Ave.,

Philadelphia 24. The machine is the Sentinal vacuum powder filling machine, manufactured by Packaging Industries, Inc., Montclair, N. J. Stokes & Smith has exclusive selling rights in the U. S. and Canada.

Operation of the Sentinal filler is said to create no friction on the powders, thereby eliminating lumping or caking during the filling cycle. A controlled vacuum principle is used to prohibit any continual dribble and to permit large nozzle openings with

consequent high filling speeds. In operation, a container is lifted until it contacts the filling head. when the cycle starts immediately. Material flow occurs only when a predetermined vacuum has been reached in the container. Granular, free-flowing or nonfree-flowing powders can be handled. A single operator is required and production up to 20 per



min. can be obtained, depending on size of opening and capacity of the container. Duplex filling heads are available to practically double production on smaller-sized containers. The standard model will handle containers from small thimble size to a maximum of 12 in. in diameter and 18 in. in height. Where a shroud is required due to construction or frailness of containers, 9 in. is the maximum container height. The filler head raises or lowers for different container sizes and product change-over requires but a few minutes for cleaning of hopper and head. One-direction air flow toward vacuum source avoids chances of product contamination with residue from previous product in the vacuum line.

The Sentinal filler handles a wide range of products including bath salts, powdered milk, seasonings and spices, chocolate powder and talcum. Difficult containers successfully filled include small shaker-top bottles, squeeze bottles and canisters with either round or oval openings. Floor space requirements are 5 by 2 by 6 ft. Weight is 800 lbs.

A NEW POWER-DRIVEN STRAPPER

has been announced by Acme Steel Co., 2840 Archer Ave., Chicago 8. Strap joints are spot welded on this machine, designed to eliminate all operations requiring physical effort. The



manufacturer reports that unskilled operators can be used and that women workers can strap packages at high volumes and maintain uniform strap tension. The machine has a 31-in.-high table height to align with standard conveyor systems. Roller sections and 14 ball-transfer rollers built into the table top make it easy to turn and position

Makes good merchandise sell better...

Kodapak Sheet is brilliant... crystal clear, gives added glamour and sales appeal to whatever product it packages. In fabrication, it is free from defects and always efficient and economical to use.

For further information, consult your local representative or write: Cellulose Products Division, Eastman Kodak Company, Rochester 4, N. Y. Sales offices: New York, Chicago, Dollas, Sales representatives: Cleveland, Providence, Distributors, San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo, Meyer & Co.), Toronto, Montreal (Paper Sales, Utd.). Cosmetics, courtesy Caty, Inc.

Kodapak Sheet

"Kodopok" is a trade mark



ready for action...FAST

because it's protected by

ALCOA FO

Degreasing small arms used to be a mean chore. Now, a newly developed pouch puts this "45" in the soldier's hands . . . ready for instant action.

From a protective standpoint, this pouch more than matches the effectiveness of former greasing methods. Much of its success is due to its sparkling liner of aluminum foil. Laminated to other

due to its sparkling liner of aluminum foil. Laminated to other barrier materials, foil blocks the destructive inroads of dust, dirt and moisture.

Alcoa, and its customers—the nation's leading packaging firms—are continually developing new ways to package many products better... in foil and foil laminates. For full information on possible applications and availabilities, just call your local Alcoa sales office, listed under "Aluminum" in your classified phone directory, or write: Aluminum Company or America, 1760 G Guif Building, Pittelurgh 19 Panaraylangia. Pittsburgh 19, Pennsylvania.



ALCOA TELEVISION—CBS Network, 6:30 to 7:00 P. M. EDST every Sunday on most stations—8:30 to 9:00 P. M. in far West





Equipment and materials

the package during strapping. The operator centers the package, feeds strap material by a foot pedal control while guiding the strap around the package and into a slot with his right hand. The operator's right hand also controls an operating switch which tightens the strap, cuts it and fastens it with a two-point spot weld. This new line of strapping machines can be furnished to accommodate strap sizes in widths of %, ½, ½ and ½ in. and in thicknesses up to 0.023-in. Strap tensions up to 750 lbs. can be obtained. A reel stand to hold 100-lb. coils of Acme Steel strapping, standard oscillated wound, permits quick loading a new coil without lifting.

STREAMLINED TOILETRY AND COSMETIC BOTTLES

have been introduced in a new Contour Line of stock-mold containers designed by the packaging research department of Owens-Illinois Glass Co., Toledo, Ohio. The company supplies



these Duraglas bottles in 1-, 2-, 4-, 6- and 8-oz. capacities. The new shape combines fine classical styling with good stability, lightest practical weights and large label space. It is suitable for packing-line operations. The shoulder shape contributes to both appearance and strength, and offers a popular type of hand grip. Empress plastic closures are also by Owens-Illinois.

COLLATED MULTIPLE WRAPS

to speed up packaging and simplify the user's inventory are being marketed by Paterson Parchment Paper Co., Bristol, Pa. Known as Paterson Trip-L-Wrap, the new packaging units offer



users of multi-layer wrappings the three layers precut, collated and bound together along one side. In one application, a wrapper for ham and bacon has three sheets consisting of: (1) outer wrapper of high wet-strength, grease-resisting vegetable parchment printed with the packer's name and design; (2) a middle sheet of absorbent paper and (3) an inner

grease-resisting barrier. Operators using the Trip-L-Wrap pick up the three sheets as if they were one.

A VERSATILE BOX FRAMER

that will adjust quickly to nail boxes in a wide range of sizes has been introduced by Food Machinery & Chemical Corp., Riverside, Calif. The machine, known as the FMC industrial box framer, will frame any box within the cross-section range from 9 to 26 in. and in lengths from 19% to 50 in. Adjustment to any size within this range makes it profitable to frame as few as 25 boxes in a run, according to the manufacturer. A single operator completes the framing of a box in three nailing strokes; sides are end nailed in one stroke each and bottom is



If you have weighing and filling problems, take a look at this ELEC-TRI-PAK to get solution-finding ideas.

User reports indicate how it eliminates problems . . . and saves time and money. One says: "We would hate to be without our eight ELEC-TRI-PAKS. As you know, we have ordered two more." Another reports: "We fill without worries of over or underweight."

Guaranteed accuracy and speed
We don't just make claims for the ELECTRI-PAK... we guarantee accuracy and
speed. This assures you of substantial
savings... more than you need to justify
ELEC-TRI-PAK purchase NOW.

Use the handy coupon below to get ALL the facts.

TRIANGLE Package Machinery Co.

6640 West Diversey Ave., Chicago 35, III.

Sales Offices: New York * Newark * Boston *
Baltimore * Atlanta * Dailas * Denver *
Los Angeles * Portland * Montreal * Mexico City

RETURN COUPON FOR FREE FACTS — — — —

To Triangle Po 6640 W. Dive Please ser ELEC-TRI-	rsey,	Ch	ica olet	go e i	3:	5			a	be	ut	ye	wr	n	PW	rly	i	m	pr	ov	100	di	
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New Peters Model CCY-L Folding & Closing Machine prompts moneysaving ideas

Here's a machine that isn't content to save money all by itself. It generates packaging and production ideas . . . suggests new, improved, more economical ways of folding, lining and closing your cartons.

At least, that's the experience of companies who have seen and installed the new Peters Model CCY-L Carton Folding & Closing Machine.

Your investigation will be well worth while. Call or write . . . or send samples of your cartons for specific recommendations.



MACHINERY COMPANY

4712 Ravenswood Avenue

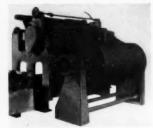
Chicago 40, III.

Equipment and materials

both end and edge nailed in rectangular pattern with up to 48 nails on the third nailing stroke. Parts inserted by operator are securely held in squared-up position during the nailing strokes. Completed boxes are ejected through the open back of the machine for removal. A detailed, illustrated engineering bulletin is available from Food Machinery & Chemical Corp., Packing Equipment Div., Riverside, Calif.

A CONTINUOUS REWINDER FOR CORELESS ROLLS

has been developed by Inta-Roto Machine Co., Richmond, Va. Designed for rewinding in short lengths such materials as locker



foil, counter rolls and insulating materials, the new automatic rewinder, Model RS-1, has two collapsible cores. The web winds around one of the cores until a predetermined length is reached and cut; immediately the cut web is started around the second core while the operator removes

the roll from the first core, thus providing continuous rewinding. The machine consists of an unwind stand for mill rolls up to 36 in. in diameter, a slitting attachment for side trimming or slitting the roll, a pull unit and a two-arm rewinder.

MIDGET-SIZE AEROSOL CONTAINERS

for packaging a variety of spray products from insecticides to paints and lacquers have been introduced by the Continental Can Co., Inc., 100 E. 42nd St., New York 17, N. Y. The new small aerosol container is just half

small aerosol container is just half the size of the 12-oz. one. Like the large cans, the small containers come in two styles—the concave-top and the dome top. Both styles have openings to fit standard valves of the packer's choice. They may be lithographed with brand name and design. Continental believes that the growing popularity of aerosol products may be increased further with the use of these small containers. With the midget can, packers may introduce new products and supply inexpensive, small aerosol packages.



NARROW POLYETHYLENE TUBING

is now available in production quantities from Chippewa Plasties, Inc., 210 E. Columbia St., Chippewa Falls, Wis. Sizes as small as 1-in.-wide layflat with 0.002-in. wall are in production, the company reports. Packaging of small parts or units is mentioned as being important among the uses for this small tubing.

A NEW 5-LB. FROZEN-SHRIMP CARTON

being offered to the frozen-seafoods industry is made without staples, yet is reported to be so rigid that it sets up squarely. It is highly protective, since it is coated with heavy surface wax inside and out. Thus the carton is protected not only from water in the shrimp, but also from moisture on the packing table. The leakproof, high-gloss carton is made in one piece, sets up quickly and easily, and maintains its rigidity through hand packing and machine overwrapping, according to the

company. Tests conducted by the manufacturer, Marathon Corp., Menasha, Wis., showed that the high-gloss waxing prevents staining of the package and that the frozen contents do not stick to the carton, but strip off cleanly when removed. This same high-gloss principle has been applied by Marathon to two other frozen-seafood packages, a two-piece 5-lb. carton for fish and a one-piece 1-lb. fish carton.

A NEW DISPENSER FOR ROLL LABELS

is reported to be the first such machine that will mechanically eject, moisten and cut printed labels and deliver them accurately cut to center between each printed design. The manufacturer—Seal, Inc., of Shelton, Conn. (an associate company of



Better Packages, Inc.)—claims savings up to 50% over other methods of labeling. Patented Automat labels can be dispensed only with this new SealLabelor. Automat labels in roll form are easily stored and keep fresh longer—enabling larger quantity, more economical purchases. Labeling operations are said to be faster and easier with the new SealLabelor. The labels may be used to identify products or to seal packages. The SealLabelor is said to give securely sealed, smart-looking packages because of its pressure-controlled tape-moistening unit. Automat labels are available from local paper merchants or Counterboy distributors in the following ways: an introductory offer including a standard label design and one model SealLabelor; standard labels made to fit most business needs, incorporating the customer's copy, trademark, emblem, etc.; stock labels printed to fit certain business needs.

A RAPIDLY CONVERTIBLE FILLER

manufactured by the F. L. Burt Co., 571 Seventh St., San Francisco 3, Calif., is reported to fill containers from gallon



down to quart size without any change of parts. A single-shot piston discharges 15 or more fills per minute of the desired quantity with complete accuracy, according to the manufacturer. The machine requires 10 min. or less to dismantle and clean. It is equipped with a 40-gal. cone or U-shaped hopper and is sturdily constructed of exceptance.

tionally heavy castings and acid-resistant stainless steel and nickel alloy contact parts. This inexpensive machine is reported to simplify the filling of jams, mustard, relish, mayonnaise and similar semi-solid products.

NEW PACKAGING MACHINE MOTORS

to be shown at the West Coast Packaging Show in Los Angeles, Aug. 12, 13 and 14 include two from U. S. Electrical Motors, Inc. One of them, which gets its first public showing at this time, has a right-angle take-off shaft and worm gear drive. Called the U. S. Type GW Syncrogear, it comes in a range of \$\% \text{to 3 h.p. Another said to (This article continued on page 158)}



No need to hide your product in order to protect it.

Lusteroid vials and tubes provide the ideal package for many products today because these distinctive plastic containers display as well as protect through their crystalclear walls that are strong, tough, unbreakable.

You'll like the economies made possible through Lusteroid's light weight, printability and low original cost.

Why not write for samples of these colorful containers now? They come in standard diameters from $\frac{1}{2}4''$ to $\frac{1}{2}\frac{1}{2}2''$ and lengths up to 6''. Cork, slip-on and screw-cap closures.

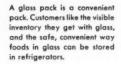
> Find out today how you can s-t-r-e-t-c-h your packaging dollar with Lusteroid.



Lusteroid Container Company, Inc.
10 West Parker Avenue, Maplewood, New Jersey

"OUR CUSTOMERS LIKE TO SEE WHAT THEY ARE BUYING"





says T. G. Harrison,
President,
Winston and Newell Company,
Sponsors Super Valu Stores
and U-Save Stores,
Minneapolis,
Minnesota

"Women are born window-shoppers. Our customers like to see what they are buying, especially where size, shape or color are important factors. It is a pleasure for us to offer them highest quality merchandise which will live up to the requirements of modern visible packaging, such as glass or cellophane."



The time-proved glass package for prepared foods is the only visual package for processed* foods!

Glass has long been a selling package for jellies, ketchup, pickles, peanut butter and many other products. When this same selling power of glass is put to work in canned-goods departments, the result is extra sales, impulse sales.

Proof that glass packs in the canned-goods department increase total sales was established by careful market tests in the American Stores of Philadelphia. There, the new technique of displaying both glass and

tin packs in the same space previously used for tin alone paid off, in every instance, by increased sales. TOTAL SALES of all items tested increased 35.6%.

Not only does visibility at point of purchase create initial sales, but the convenience of glass to the consumer pyramids repeat sales. Such advantages as visible inventory, and safe, easy refrigerator storage of unused portions are increasingly important to convenience-minded housewives.

Duraglas containers sell food by sight

OWENS-ILLINOIS GLASS COMPANY . TOLEDO I, OHIO . BRANCHES IN PRINCIPAL CITIES

WRENN PAPER COMPANY

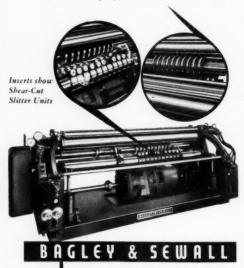
SLITTER-REWINDER

The Wrenn Paper Company, widely recognized for its high quality products, was faced with the problem of slitting a hard-to-handle material. Clean, square edges and uniformly wound rolls were of utmost importance.

After considering several machines, the Bagley & Sewall #15 Shear-Cut Slitter-Rewinder was selected.

B & S Slitters and Rewinders are doing outstanding jobs in mills and converting plants all over the country. Their many unique money-saving advantages make them the first choice of the industry. Before you buy, compare...and your choice, too, will be B & S Slitting and Rewinding equipment.

For full details write to The Bagley & Sewall Company, Watertown, New York.



WATERTOWN, NEW YORK

Fareign Representative: CASTLE & OVERTON, INC., 630 Fifth Avenue, New York 20, N.Y.

Equipment and materials

(This article continued from page 155) be of interest to packaging engineers will be the company's V.A. Varidrive, light weight in design, with a variable speed range from 4 to 10,000 r.p.m. It is available in single and three-phase. Heavy-duty Syncrogear and Varidrive models and totally enclosed types will also be shown. For bulletins on the new motors write to U. S. Electrical Motors, Inc., 200 E. Slauson Ave., Los Angeles 54, Calif.

NEW FEATURES NOW STANDARD EQUIPMENT

on the automatic rotary vacuum fillers and Sanitair automatic bottle cleaners manufactured by U. S. Bottlers Machinery Co., 4015 N. Rockwell St., Chicago 18, are a friction drive clutch



Automatic bottle cleaner (left) and automatic rotary vacuum filler (below) feature friction drive clutch and bottle feed worm as standard.

and a bottle feed

The drive clutch is comparable in its action to a fluid or hydraulically coupled drive in that it releases its grip when the machine is even slightly overloaded. This clutch cushions the operating mechanism and drive assembly against any shocks or strains and provides smooth start-

ing or stopping of heavy rotary machines. Adjustment of tension on the grease-coated friction surfaces is simple.

Timing of bottles entering the company's rotary fillers and bottle cleaners is now handled by a feed worm which positions the containers before they reach the feed star. Worm feed is now standard equipment, but dial feed is also available.

In addition to the new features standard on all models, U. S. Bottlers Machinery Co. has also introduced an entirely new rotary vacuum bottler model, designated NC-24. Designed for higher speeds on larger containers, this model offers speeds up to 60 per min. on containers to 128-oz. capacity; speeds of 120 per min. are possible on 16-oz-capacity containers.

U. S. Bottlers Machinery Co.'s line now includes six basic models of rotary automatic vacuum fillers and 14 adaptations. The equipment is being used successfully to fill liquid products ranging from free-flowing liquids to syrups, oils and waxes for the foods, toiletries, pharmaceuticals and chemicals industries. A variety of filling tube assemblies, supplied as standard equipment, permits choice to fit containers. Stainless steel contact parts are standard.

A NEW AUTOMATIC PACKAGING MACHINE

that can package a variety of liquids and semi-liquids in either transparent or opaque plastic film has been introduced by Stokes & Smith Co., a wholly owned subsidiary of Food Ma-

designers and

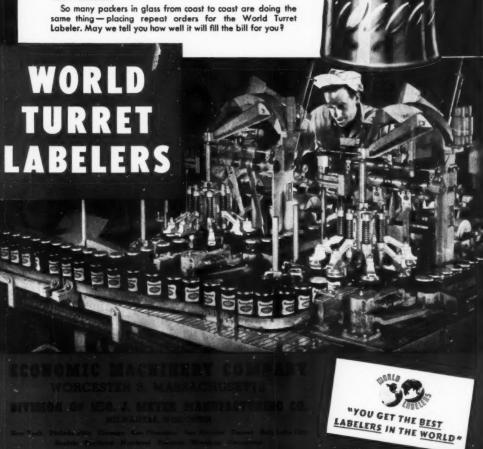
THERE IS NOTHING LIKE A

Satisfied Customer

The General Preserve Company of Brooklyn, N. Y., a leader in the Preserve Industry for more than 30 years, installed their first World Twin Turret Labeler in 1945. Ever since, for seven years, this packer of a line of outstanding Preserves, Jellies, and Marmalade, has received top labeling production from this machine — at the rate of 168 jars per minute.

The Factory Superintendent of the General Preserve Company says: "I like the Turret Labeler because it is economical to operate and easy to maintain. I know I can rely on this machine to perform an automatic, clean, precise labeling job on our own HONEYDEW Brand labels and on the many private brands which are packed in our factory."

Naturally, when production demands increased, General Preserve Company ordered another World Twin Turret Labeler.



Honeydew

THIS PUMP

... for vacuum and pressure...

(for Printing & Packaging Machinery)



is Oil-free Never needs lubricating!

The Dexter-Conde DRI-AIR Pump delivers clean dry air and has these added advantages:

- · Double sealed, grease-packed ball bearings
- · No oil to get into the air stream
- · No oil cups to be filled and turned down
- · No greasy dirt around pumps
- · No fire hazard
- · No streaking of sheets from air blast
- Carbon graphite vanes don't stick; don't warp.
 Are chemically inert. Provide their own lubrication, becoming more efficient as pump is used.
- Pump is built with close tolerances. Has no gaskets to leak or blow
- Three sizes. One or a combination will meet any requirement.

Put your vacuum or air blast problem up to us. Write for literature.

Dexter Folder Company

General Sales Offices

330 West 42nd Street • New York 36, N. Y.

Equipment and materials

chinery & Chemical Corp., Frankford, Philadelphia 24, Pa. This new Stokeswrap machine fills the plastic film, forms a pouch and heat seals the edges at speeds up to 120 bags per minute. It features accurate filling with positive displacement piston filling heads. All parts in contact with the product have sanitary fittings that are non-corrosive. Other features include easy adjustment of fill with a hand wheel without stopping the machine and easy cleaning of machine at end of a production run. The manufacturer recommends the new machine for packaging liquids, creams, oils, greases, juices, concentrates, dressings, lotions, chemicals, etc.

A NEW HOT-DRINK CONTAINER

known as the Metro Check introduced by Continental Can Co., Inc., 100 E. 42 St., New York 17, is designed to deliver "coffee-to-go" to the customer's desk or work bench "with" or "without" with less chance for error. This two-ply container with pull-tab lid was designed especially to do away with the hastily scrawled initials used by fountain and luncheonette employees by providing neat squares for check marks opposite the words "sugar & cream," "with sugar," "with cream" and "black." The listing



appears on the lid and again in white lettering on dark strip around the body of the container. Metro Check containers come in 6-, 8-, 10-, 12- and 16-oz. sizes.

TWO NEW POLYETHYLENE ITEMS FOR CHEMICALS

have been announced by Plax Corp., Hartford, Conn. One is a new grade of polyethylene layflat tubing designed for lining drums and bags used to contain corrosive acids and other materials in bulk. The new tubing, called DL-Grade, comes in wall thicknesses from 0.0015 to 0.004 in.; diameters available are from 25 to 40 in. The material is said to be chemically inert and free from pinholes.

The other new item is a 16-oz. Plaxpak polyethylene bottle for laboratory use with acids or other materials. It is a Boston round style, with modified neck and finish to take either conventional 38-430 or 38-mm. Plax buttress polyethylene closures. To prevent drip and aid in pouring, the new bottles have a sightly flared or flanged lip.

A NEW PHOTO-ELECTRIC REGISTRATION CONTROL

introduced by the S. J. Deitz Co., 38 River Edge Rd., River Edge, N. J., is designed to control the operation of all types of packaging and bag-making machines processing materials such as paper, glassine, cellophane and foils. The unit reacts to the passing of a registration mark printed on the web and causes the machine operation to fall in step with the movement of the printed design on the web. The control consists of a photo-electric scanner and a control amplifier. The scanner is mounted on the machine and is adjustable for both transmittedlight and reflected-light operation. Two types of phototubes supplied with the scanner are said to enable operation with all possible registration-mark colors. The control amplifier is enclosed in a specially designed housing convenient for installation, maintenance and servicing. All operational controls are accessible behind a small door in front of the housing. A test meter is available which plugs into a test jack on the control amplifier and measures the light intensity at the scanner phototubes. This affords the operator a means of checking and detects causes of faulty operation resulting from line voltage changes, variations in the movement of the web, etc.



Plants and people

E. E. Ellies, formerly in charge of Pliofilm sales as manager of the Films and Flooring Div., Goodyear Tire & Rubber



Co., Akron, Ohio, has been appointed vice president and director of sales of Transparent Package Co., Chicago. R. R. Stigler, vice president of Transparent for many years, will assume the duties of national accounts manager and L. B. Tauber,

vice president in charge of Eastern Division Sales, has been placed in charge of the entire United States sales staff as field sales manager, with headquarters in

Zellerbach Paper Co., San Francisco, has been established as the distributor for Olin cellophane to direct users in the Western and Pacific Coast States. Merchandising and distribution of Olin cellophane will be handled by Andrew P. Johnson, Zellerbach Packaging and Film Department manager, under the supervision of Robert H. Knight, manager of the Zellerbach Wrapping Paper Merchandising Department.

Olin Industries, Inc., East Alton, Ill., has announced the purchase of a 665-acre site on the Wabash River in Indiana between Covington, Ind., and Danville, Ill., as a possible site for a cellophane plant, or for other peacetime expansion.

The Olin Cellophane Division of Ecusta Paper Corp., subsidiary of Olin Industries, Inc., has announced the appointment of Van L. McNeel as its Southern District sales manager. Mr. McNeel's territory will include the Southern states and Texas, with headquarters in the Candler Bldg., 127 Peachtree St., N. E., Atlanta, Ga.

Celanese Corp. of America, New York, has announced a personnel realignment to provide expanded packaging services.

Edward W. Smith, III, has been appointed assistant director of sales, Transparent Films Department, to assist David S. Hopping, director of sales of this department. Also appointed assistant directors of sales, Transparent Films Department, are: Charles M. Reynolds for the Midwest district and Richard W. Leiter for the Eastern Seaboard. Two packaging specialists, Edward H. Robnett and William H. Farrell, have been appointed to assist in sales development work.

Edward Daly has been transferred from the Celanese acetate film plant at Newark, N. J., to the sales department to serve as a packaging specialist, instructing customers in the field processing of film. He will assist Leo Birzstein, field processing engineer of the Transparent

The Aluminum Co. of America, Pittsburgh, Pa., has announced that Frederick C. Stakel has been made advertising manager. Since 1947 Mr. Stakel has been manager of advertising and sales promotion for the Brown Co. of Berlin, N. H., and prior to this was New York district manager for the Scott Paper Co.

General Foods Corp., New York, has promoted Francis X. Golden to the newly created position of purchasing agent for packaging and sales promotional mate-

Several important assignments have been announced by the Pliofilm Department of The Goodyear Tire & Rubber Co.,





Haney left) and F. H. Kimball

Akron, Ohio. G. S. Haney has been named manager of Convertor and Distributor Sales; Frank H. Kimball, man-

ager of Sales Development and R. W. Anderson, section chief in charge of scheduling and deliveries. Working with Mr. Kimball will be Gerald Fox on coordination of technical material and Thomas McCormish in charge of packaging machinery. With Mr. Anderson will be Arthur Cun-

nington on customer queries.



Anderson

Dr. R. H. Boundy, manager of the plasties department of Dow Chemical Co., Midland, Mich. has been named to head the company's research activities. The new position of director of research replaces a committee form of direction which has been carried on since the death

of Dr. Willard H. Dow in 1949. C. B. Branch will replace Mr. Boundy as manager of the plastics department. John Van Horn replaces Mr. Branch as manager of technical service and devel-

Dow has also announced that construction on a new plant for the manufacture of polyvinyl chloride is progressing satisfactorily. The new facilities at Midland, Mich., are expected to be completed and in operation early this summer. Dow will supply this material in unformulated resin form.

Owens-Illinois Glass Co., Toledo, Ohio, has announced that its subsidiary, American Structural Products Co., has changed its name to Kimble Glass Co. and will acquire the business and assets of the Kimble Glass Division. Stanley J. Mc-Giveran, vice president of Owens-Illinois, who is presently general manager of Kimble Glass Division and president of American Structural Products Co., will be president of the subsidiary whose net assets will total more than \$20,000,000. Kimble Glass is a leading producer of mold blown and fabricated containers for the pharmaceutical, drug and cosmetic industries. American Structural Products Co. makes glass television and radar bulbs, glass insulators for communication and power lines and glass block for the building industry. Carl R. Megowen, president of Owens-Illinois, said that the move will increase the efficiency of these two departments, which had been under the same management.

Dr. Russell B. Akin has been transferred to the plastics sales section of the Polychemicals Department of E. I. du Pont de Nemours & Co., Inc., Wilmington, Del., reporting to the New York office. Dr. Akin has served since 1949 as technical advisor to the New York sales office.

The Bakelite Co., a division of Union Carbide & Carbon Corp., New York, has announced the appointment of Arnold F. Sward as manager of the newly created

Consumer Products Department. Mr. Sward's new duties will involve all Vinylite plastic film and sheeting as well as other materials produced from Vinvlite resins. In addition, Mr. Sward will be responsible for the operations of the Consumer Film and



Sheeting Division and the Calendering Materials Division.

Other executive manges include the appointment of R. Price to the newly established part of merchandise manager, Consumer Products. J. B. Knowles will succeed Mr. Price as manager, Consumer Film and Sheeting Division, and C. D. Schuman will succeed Mr. Sward as manager of Calendering Materials.

Bakelite has also announced a program for consolidation of all sales activities





Put a packaging "floor" under your product

Asphalt tile is tough, and durable—once it's installed. But until it is cemented to a solid surface, this popular building material is subject to breakage.

That's why "KENTILE" is shipped in a well-cushioned H & D double wall corrugated box. This extra strong, lightweight box provides extra protection to the product. Economically it lowers shipping charges

and reduces breakage to an absolute minimum.

The H & D Package Laboratory is ready to engineer a better shipping box for your product . . . a box that will protect your product in transit and help to promote and merchandise it. Write for free booklet, "How To Pack It." Hinde & Dauch, 5207 Decatur Street, Sandusky, Ohio.

HED
HINDE & DAUCH
Authority on Packaging



Schaefer LABELERS



APPLY GLUE TO LABELS

FOR

BOXES-BOTTLES-CANS

PARCEL POST PACKAGES



PRACTICAL CONSTRUCTION. Bronze bearings. Calibrated dial glue control. Hand & motor driven. Use vegetable, resin glue latex and hot animal glue. 7", 12", 16", 22", 28", 34", 42", wide.



SCHAEFER GLUER-CEMENTER. Heavy-duty construction. Sizes 16" to 52" wide, for coating cardboard, leather, cork, masonite, foom rubber, fibre, leatherette, canvos & paper.

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Agents in principal cities

Plants and people

formerly carried on by two separate groups known as the Thermoplastics Department and the Thermosetting Department. George C. Miller has been named vice president in charge of sales, and Clinton W. Blount becomes vice president and general sales manager. It is felt that the consolidation will promote greater sales efficiency.

After 44 years of service, C. H. Black has announced his retirement as chairman of the board of American Can Co., New





C. H. Black (left) and W. C. Stolk

York. Mr. Black joined the company as a sales traince in 1909 and successively held the positions of vice president in charge of sales, executive vice president, president and chairman of the board.

W. C. Stolk has been designated chief executive officer, following Mr. Black's retirement. Mr. Stolk has had 36 years of service with the company and has been president since 1951.

Announcement has also been made of the appointment of D. B. Craver as gen-

eral manager of sales. Succeeding Mr. Craver will be F. B. Newcomb, the former assistant manager of sales. F. J. Dowling replaces Mr. Newcomb as assistant manager of sales and R. D. Folk becomes the new sales division manager.



D. B. Craver

Replacing Mr. Folk, former sales manager of the Michigan district, will be R. G. Warmbold, who has served in the Michigan district office since 1948.

Tyler P. Cobb has been appointed sales manager at the Rochester, N. Y. district office of American Can.

The directors of Mid-States Gummed Paper Co., Chicago, have elected Arno L. Zinke president of the firm. Mr. Zinke has been with Mid-States since 1940, serving as sales representative, sales manager, vice president and general manager.

Shellmar Products Corp., Mt. Vernon, Ohio, producer of flexible packaging materials, has assumed ownership of 99% of the Standard Printing Co., Columbus, Ga., in a share-for-share exchange of common stock. As a result. Shellmar will now have production facilities at a location well situated to serve the growing industrial population of the Southeastern states. Under Shellmar direction, the Standard plant will assume a wider and more diversified line of packaging materials.

Shellmar Products has also announced the appointment of George H. Sollenberger as manager of Plastic Products Sales. A major part of his activity will include acting as a source of integration and assistance to Shellmar salesmen in the Shellene sales field.

The Oxford Paper Co., New York, has announced the appointment of Van Buren Taliaferro as Eastern sales manager. Mr. Taliaferro, with Oxford for 25 years, will continue to serve as advertising manager along with his new duties.

The Visking Corp., Chicago, has selected Centerville, Calif., as the location of its newest plant for the production of Visqueen polyethylene film and other plastic products. The most modern equipment and methods of manufacture will be housed in the new plant.

Jack Gerard has been appointed to the sales-service staff of Mosstype Corp., New York, manufacturer of rubber printing plates, design rollers and auxiliary aids for the aniline printer. Mr. Gerard was formerly manager of the company's production department.

At the same time, Murray Kessler has been promoted to the post of production department manager and Henry Salmaggi has been named as his assistant.

In line with its continuing policy of expansion, the Thatcher Glass Mfg. Co., Elmira, N. Y., has announced a number of changes and promotions. Philip W. Hatch has been appointed assistant to David R. Parfitt, vice president in charge of sales. Mr. Hatch was formerly with Ball Bros., Muncie, Ind. Also new in the sales department is Walter S. Bazzett, appointed sales manager of Thatcher's Beer and Beverage Container Division. Mr. Bazzett was formerly sales manager of the Milk Container Division.

Since Thatcher's recent merger with McKee Glass Co. of Jeannette, Pa., Harold E. Donaldson has been transferred from Jeannette to Elmira and made manager of Specialized Product Sales.

Thatcher is entering the consumer glass products field for the first time.

New York offices of Tennessee Eastman Co., Division of Eastman Kodak Co., Rochester, N. Y., together with offices of associated Eastman units, have moved

FROM HOUSE IN TO STAGE DAYS

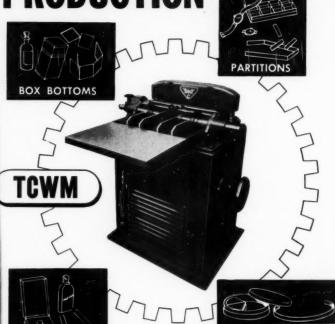


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1952

FASTER SET-UP BOX PRODUCTION



Roda Brothers' Model TCWM meets the set-up box maker's need for a high-speed automatic machine for producing the many sizes of smooth narrow board strips which they utilize in large quantities.

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The TCWM operates at two speeds-180 and 225 cuts per minute, delivering a maximum of 40,500 pieces per hour, each slit to the proper width and accurately cut off.

Wear and tear has virtually been eliminated, and the mechanisms of the machine are enclosed to keep them dust-

free. Its small size and solid construction make the TCWM most desirable. Write for full particulars.

automatically on this one machine



LIMITED

STRIPS

Plants and people

into new quarters at 260 Madison Ave., New York 16, N. Y. Included in the move are the A. M. Tenney Associates, Inc., Eastman Kodak Co.'s New York sales office for Kodapak sheeting, the Tennessee Eastman Co. Advertising Department and regional sales offices for Eastman industrial chemicals and Tenite plastics.

Perry Envelope & Bag Co., Inc., New York, N. Y., has again expanded its operations by erecting a modern factory at 3639 Dyre Ave., New York 66, N. Y. Equipped with the latest in printing and bag-making machinery, PEBCO'S new headquarters provide the facilities to service the trade on a nation-wide basis.

American Excelsior Corp., Chicago, Ill.,

has obtained the services of Jack L. Ware as sales manager. Mr. Ware is well known in the packing, shipping and packaging field. He is executive vice president of the Society of Industrial Packaging & Materials Handling Engineers and a member



of the Packaging Council of the American Management Assn.

The Cryovac Division of the Dewey & Almy Chemical Co., Cambridge, Mass., has announced a re-organization and expansion of its sales and development staffs to provide a headquarters in Chicago to improve service to the growing number of Midwest customers. Robert A. Miller will coordinate sales in the Midwest area and Joseph Welch, Jr., will coordinate sales in the East, with headquarters in Cambridge. Curtis Gumm will handle sales in the Portland, Ore., area, replacing Dale Lamoreaux, who has been shifted to Los Angeles to extend coverage in that area.

The development staff, headed by Robert Lowry, now numbers seven packaging engineers to provide field service on packaging problems and develop new uses for Crv-O-Rap bags. Other members of the staff are John A. Cook, who has been moved from Cambridge to resident development engineer at Chicago, Dr. Edward A. Nebesky, Milton A. Howe, Richard Parsons, Ralph Garson, and Ben Fairbank.

The Organic Chemicals Division of Dewey & Almy has announced that John G. Broughton, Jr., has joined the staff as Lugano, Switzerland a salesman. Mr. Broughton will sell co-

BANDS

polymer latices to the paint, paper and textile industries.

Also joining the company as salesman is John H. McCarthy, Jr., who will be on the staff of the Adhesives and Coatings Division. Mr. McCarthy will handle sales of Darex resin emulsion adhesives in Western New York, New Jersey, Pennsylvania and the Southern Coastal States.

Union Bag & Paper Corp., New York, has announced the following changes in its sales organization: Harold Carlson, formerly of the New York sales office, will supervise Flexible Packaging sales in Maryland, Delaware, Virginia, West Virginia and North Carolina. He will headquarter in the Baltimore office. Jack Bostian, formerly of the New York office, will be the Flexible Packaging sales representative for South Carolina, Georgia, Florida and Alabama. He will operate from Jacksonville, Fla.

Riegel Paper Corp. has moved its New York office to 260 Madison Ave. The company will continue to use its present mailing address, P. O. Box 170, Grand Central Station, New York 17, N. Y.

Following the resignation of C. U. Harvey, the directors of the Hinde & Dauch Paper Co., Sandusky, Ohio, have appointed William F. Pfeiffer, Ir., vice president of Central Sales. Mr. Pfeiffer has had 14 years of sales experience with Hinde & Dauch.

E. Kirby Preston has been appointed to the sales staff of the Celluplastic Corp., Newark, N. J. He will devote his time to market research and analysis as well as to product development and merchandising.

Appointment of Wallace Foster as director of drug merchandising has been announced by the Einson-Freeman Co.,

Inc., Long Island City, N. Y., lithographers and display manufacturers. Mr. Foster, former national advertising manager of American Druggist and a national authority on drug promotion at the point of sale, will be available to manufacturers, jobbers



W. Foster

and dealers for practical counsel on all problems related to promotions at the retail selling level.

P. C. McGrath, formerly sales manager of the Sales Division of Bemis Bro. Bag Co., St. Louis, Mo., has been appointed assistant manager of the St. Louis bag factory and sales division. R. W. Lahey, Jr., has been assigned to the newly created position of textile and paper bag specialist at the Bemis plant in Norfolk.

An extensive expansion program, including the addition of another building, has been completed at Paper Machinery &



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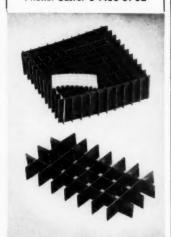
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Plants and people

Research, Inc. The entire plant layout has been revised and a production-line type of operation inaugurated. The acquisition of a company airplane makes it possible to contact customers on a nation-wide basis. Pamarco now serves not only the paper-converting trade, but also the plastic manufacturing and finishing trades and industry in general. All facilities are at 1014 Oak St., Roselle, N. J.

W. W. Finn has been made general manager of the Chicago Divisional Sales Office of General Container Corp., Cleveland, Ohio. Mr. Finn will represent General Container Corp. and subsidiaries in the sales of corrugated, folding and setup boxes in that area.

Central States Paper & Bag Co., St. Louis, Mo., has announced that Jack Kelsall is now with the sales organization at the company's Seattle branch. Mr. Kelsall has had years of experience in package designing and sales.

Kenneth M. Hay has been appointed sales manager of the commercial glass container division for Ball Brothers Co., Muncie, Ind. Previously, Mr. Hay has been associated with the Thatcher Glass Mfg. Co. and the C.I.T. Corp.



K. M. Hay

The advancement of Everett E. Ester to a new position as Ball field sales manager has also been announced.

The Gaylord Container Corp., St. Louis, Mo., has elected H. Sam Priest a director. Mr. Priest has been in charge of the company's Minerals Division since 1945. William L. Meyer was elected secretary and treasurer, and Roy W. Heimburger was appointed controller.

A. W. Soell, Gaylord's general purchasing agent, has been elected vice president of the National Assn. of Purchasing Agents. Mr. Soell will direct the activities of the association in Minnesota, Wisconsin, Illinois, Missouri, Colorado and Iowa.

The Borden Co., New York, has opened a new chemical plant at Demopolis, Ala., the first in the Southeast to manufacture formaldehyde, synthetic resins and hexamethylenetetramine. The plant was built at a cost of more than \$1,000,000 and occupies only one-third of a 20-acre tract acquired by Borden last year, permitting expansion in the future. It includes a main

HELPFUL BOOKLETS FREE!

GUMMED TAPE PRINTER. Details on the "Tape-Printer" for printing advertising messages, inventory data, and other information on gummed tape as it is run through an automatic tape machine. American Tape Printer Co.

(G-255)

TRANSPARENT PLASTIC CONTAINERS.
Catalogue illustrates many styles of drawn and fabricated sheet acetate containers and explains the methods of decorating them. Includes complete price list. Weinman Brothers, Inc. (G-265)

FILLING MACHINE AND ATTACHMENTS. Described is the fully automatic, high speed "Fillmaster" filling machine used for dry and semi-dry products. Also included are details about various attachments. Stuyvesant Engineering Co. (G-268)

SEALING AND BONDING RUBBER PLATES. Bulletin contains specifications and directions for use of several cements and tapes which are used in adhering rubber plates to cylinders. Mosstype Corp. (6-273)

COLORED INDUSTRIAL TAPES. Fourteen varieties of industrial tapes are shown in folder on "Scotch" brand pressuresensitive tapes. Uses of eight different colored tapes are given. Minnesota Mining and Manufacturing Co. (6-289)

Any of the booklets described here plus many others—forty-four in all —are available for the asking, without charge or obligation.

Just turn to the Manufacturers' Literature page in this issue (it's printed on heavy coated paper), circle the numbers corresponding to the booklets you want, fill in the reply postcard, and mail. No postage needed.

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A Breskin Publication

575 Madison Ave., New York 22, N.Y.

building housing a warehouse, office and laboratory, and other out-buildings for the machine shop and employee service

Nearing completion is another plant, at Dominguez, Cal., where the Chemical Division will manufacture resorcin.

L. W. Harris has announced his retirement from the Ames Harris Neville Co.,

San Francisco, completing a business career of over 55 years. Mr. Harris is often spoken of as the "Dean of the Bag Industry," having been president and treasurer of this West Coast bag-making firm since 1939. He will

remain as a member of



the board of directors. Fleteher Ames will succeed Mr. Harris as president.

The Peerless Printing Ink Co., Philadelphia, Pa., a unit of Acheson Industries, Inc., manufacturer of special-purpose inks and color dispersions, has announced the appointment of William F. Polfus as research director of its technical labora-

Mr. Polfus previously served as assist-ant technical director of research and control for the Clopay Corp. and as plant chemist for Western Products.

The Fairfield Paper & Container Co., Baltimore, Ohio, announces the appointment of Howard M. Wentley, Sr., as vice president of the company's Beaver Falls Division.

The Mid-West Paper Products Co. has announced the opening of its new warehouse and general offices. The new location is at 3245 Hubbard, Detroit, Mich. Former quarters at 2747 Humboldt will be maintained by the company as a branch warehouse.

The Chamber of Commerce of Reidsville, N. C., recently sponsored a banquet to pay tribute to the Chase Bag Co. for the firm's contributions toward the growth and progress of the city. F. H. Ludington, Chase president, and key personnel of the Chase Reidsville branch were guests of honor.

The appointment of Palmer Supplies Co., 8905 Lake Ave., Cleveland, Ohio, as sales agent for the Sentinel Heat-Sealer in the state of Ohio has been announced by Packaging Industries, Montelair, N. J. Griswold & Co., Ltd., have been appointed as distributors in Canada. They maintain offices at 116 McGill St. in Montreal, and also in Toronto.

Kenneth J. Moore & Co., Chicago, Ill., has established a new office at 108 E. 31 St., New York 16, N. Y. Paul D. Denton, Jr., who has joined the staff, will be in charge of Eastern Division Sales. This



with Controlled Vacuum Label Feed*

simple • fast • versatile

• Feeds, folds, places label on the bag and seals the bag and the label straight and neat, in a single automatic operation

· Operates with cellophane, pliofilm, polyethylene, barrier materials, thermoplastic bags and the like

· Functions perfectly . . . down to the last label in the magazine

• Cycle: 45 per minute

Adaptable for practically any conveyor system. It is mobile or can be locked stationary. Can be raised or lowered.



Ask for Bulletin VLS-12

Some territories still available for established representatives.

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HEAT SEALING EQUIPMENT CO. Philadelphia 7, Pa.

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FILL your dry and semi-dry products automatically and inexpensively with a



STUYVESANT ENGINEERING COMPANY

107 STUYVESANT AVENUE

LYNDHURST, NEW JERSEY

Plants and people

office will cover Greater New York, New Jersey and Eastern Pennsylvania.

Mr. Denton is experienced in the gluing, labeling and coating machine field, having previously been with the Potdevin company.

The Dayton Folding Box Co., Harrison, Ohio, has changed the name of the firm to the Seasongood Folding Box Co. This has been done because the name Dayton, even after 50 years, has caused confusion in addressing communications to the office. The location at Harrison, Ohio, remains unchanged, as do all of the policies and personnel of the company.

Howard S. Styron has been appointed division manager of production planning and industrial engineering for the Bond Crown & Cork Co., Wilmington, Del., a subsidiary of Continental Can Co., New York. Mr. Styron was formerly with Sylvania Electric Froducts, Inc.

Lamson Corp., Syracuse, N. Y. has appointed E. H. Woodberry as sales manager of its pallet loader line. Mr. Woodberry, a veteran of nearly 20 years with the firm, formerly was field engineer at the company's Boston office.

The United Board & Carton Corp., Syracuse, N. Y., will install a top liner and continuous hydrapulper system for filler stock at its Thomson paper mill. The new system is one of many taken by management to increase production of quality paperboard.

Edward J. Sullivan has been appointed manager of the Specialty Paper Department of H. G. Craig & Co., New York, paper merchants. Mr. Sullivan, formerly with Oxford Paper Co., has served as chief of the NPA Fine & Printing Paper Section.

Ronald J. Thain has been appointed sales representative in Southwestern Ohio and parts of West Virginia, Virginia and Kentucky for the Mehl Mfg. Co., Cincinnati, Ohio, converters and packaging manufacturers.

Ed Hanna has been promoted to staff assistant to the superintendent of the Middletown carton plant of The Gardner Board & Carton Co. Benjamin E. Riley has been promoted to staff assistant to the superintendent of the company's Lockland carton plant.

Robert Kingsley has been added to the sales staff of Western Waxed Paper Division, Crown Zellerbach Corp., San



CAPPERS



RESINA

Standard, single head, automatic screw capper.





RESINA

High speed, straight line screw capper. Rated for speeds up to 300 per minute depending on size of container.





RESINA

Automatic innerseal machine for selecting and applying standard innerseals to various types and sizes of tin cans as commonly used in the oil industry.

Agents in principal cities throughout the United States and Canada

RESINA AUTOMATIC MACHINERY CO., INC.

Plants and people

Leandro, Cal. Mr. Kingsley will assist Karl Wuestenfeld, national sales manager of the carton overwrap department.

A. C. Hopkins, Jr., has been appointed director of commercial chemical development at General Mills Research Laboratories, Minneapolis, Minn. He will be in charge of market research and market evaluation of General Mills' chemical products and will also be responsible for cost and economic studies and chemical sales development.

The IMCO Container Corp., Kansas City, Mo., representatives for the Injection Molding Co. and the Flexcel Container Co., have opened a New York office at 10 E. 39th St. Lee H. Simmons, formerly with Warner-Hudnut, Inc., has been appointed Eastern sales manager. He will be assisted in package and creative design by Miss Phyllis Schaefer.

William S. Stuhr, president of the United Board & Carton Corp., has been appointed to the Advisory Board of the Institute of Industrial Research at Syracuse University.

J. D. Stimpson, merchandising consultant and packaging specialist, has joined the sales staff of the Cleveland Lathe & Machine Co., Cleveland, Ohio, manufacturer of heat-sealing and packaging equipment.

Carl H. Lambelet, retired packaging machinery executive, died at his home on June 22 after a sudden illness. Prior to his retirement, Mr. Lambelet had been vice president of American Machine & Foundry Co., New York. He had served as an official of several packaging organizations and was a contributor to Modern Packaging Encyclopedia.

Thomas H. Gagen, associated with The Hinde & Dauch Paper Co., Sandusky, Ohio, for 48 years, died on May 18 after a short illness. Mr. Gagen saw the corrugated box develop from very small beginnings to a major factor in the country's economy and developed many types of engineered boxes. Two of his more important projects were the successful introduction of the corrugated box to the canned-foods and paint industries.

Russell H. Brousseau, 58, sales representative of Phoenix Metal Cap Co., Chicago, Ill., died suddenly at his home on May 20. Mr. Brousseau had been associated with Phoenix for 35 years.

Better Glass Means Smoother Production... -ARMSTRONG'S



packaging that



International Silver adopts radically new packaging—made of visquens film. Strong, heat-sealed visquens film strong, heat-sealed visquens film envelopes lock out air, retard tarnishing, are transparent for instant pattern identification, take printing clearly. Visquens film also proves ideal for packaging foods—fresh and frozen—hardware items and many others.

Wrisley Soap — uses bag made of VISQUEEN film for both soaps and bath salts. Since VISQUEEN literally "breathes", women can appreciate scent of soaps and salts before purchase, yet products are fully protected from soiling, damage, or fingering. VISQUEEN stays strong, flexible, durable.



IMPORTANT! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. VISQUEEN is the only film produced by process of U.S. Patent No. 2461975. Only VISQUEEN has the benefit of research and technical experience of The Visking Corporation, pioneers in the development of polyethylene film.

These five examples of VISQUEEN packaging are typical results of the closely-knit teamwork between VISQUEEN and VISQUEEN converters. Converters who can give you the benefit of acknowledged polyethylene leadership . . . VISQUEEN's vast technical experience.

goes far beyond the call of duty

These converters are the *only* ones in the field who can put factory specialists into your plant, skilled visqueen chemists and engineers to work with you on your packaging problems. It adds up to this . . . visqueen converters can see that you get better packaging and bigger economy. Write for the names of the visqueen converters in your area. *Do it better—do it with visqueen!*



Pre-Peeled Potetoes — a surprising new development of the Supreme Food Service Co. set up some tough packaging problems. But visqueen film solved it! "Readi-Taters" are sealed in visqueen film liners inserted into kraft paper bags—in 30 and 60 pound units. High tensile strength plus high tear-resistance makes visqueen the logical choice.



Dry Pewdered Skim Milk — picks up moisture and "lumps" when shipped in ordinary containers. Problem was licked by using a moisture proof bag made of visqueen. Product stays dry, free-flowing and sterile. Safe, indefinite storage now possible. Visqueen bag actually coats less.



Bulk Shippers — of liquids, semi-liquids, solids, corrosives, acids and alkalis find big savings in shipping costs when they use VISQUEEN film liners with fiber drums or cartons, or steel drums. Savings in tare weight, in handling, contamination and other elements mean big economies to you. Always 100% product recovery

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For your information

The newly elected president of the northeastern Ohio chapter of the Society of In-



C. F. Sprague

dustrial Packaging and Materials Handling Engineers is C. F. Sprague, packaging engineer at The Sherwin-Williams Co. Mr. Sprague is also on the national organization's board of directors. Other officers recently installed are Don McGovern of Inland

Container Co., Henry Samson of General Electric Co.'s Lamp Department and W. S. Mielziner of Analysis Sales Co., vice presidents; Gordon Long of Hankins Container Co., secretary; Eugene A. Birch of Cleveland Graphite Bronze Co., treasurer. Two new directors are A. M. Lownsbury, Railway Warehouses, Inc., and H. R. Wilson, Firestone Tire & Rubber Co.

The Package Designers Council, a national organization to promote the interests of package designers, was incorporated last month under the laws of the State of New York. The following officers were elected: James Nash, president; Frank Gianninoto, executive vice president; Egmont Arens, secretary; Alan Berni, treasurer. Other founding members of the Council are Karl Fink, Robert Goldberg, Robert Gruen, Ben Koodin, Harry S. Lapow, Walter Margulies, Robert Neubauer and Gerald Stahl. At the organizational meeting, Mr. Nash stated, "The Package Designers Council is the answer to the growing need in the profession for an organization which will give package designers cohesion and a sense of common purpose-an organization which will establish professional standards of ethics and professional performance, promote the use of better design in industry, recommend educational standards for schools and colleges teaching package design, and encourage and guide such students." Active memberships are open to all practicing package designers. Associate memberships are open to persons engaged in various aspects of packaging activity, such as packaging engineers, teachers, advertising men, management or sales executives. There will also be classes of membership for Junior Members, Student Members, Press Members, Foreign Members and Honorary Members. Corporate membership will be open to organizations, institutions, business associations, advertising agencies, manufacturers, producers and suppliers who are interested in sponsoring the aims of the profession of package designer.

Gordon Brown was re-elected president of The Society of the Plastics Industry, Inc., at its annual business meeting held last month. Mr. Brown is a vice president of The Bakelite Co., Division of Union Carbide & Carbon Corp. Horace Gooch, Jr., Worcester Moulded Plastics Co., was re-elected chairman of the board. J. E. Gould of Detroit Macoid Corp. is the newly elected vice president and the new secretary-treasurer is John J. O'Connell of Consolidated Molded Products Corp.

Efficient and economical methods of packaging meats for self-service markets are illustrated and explained in a new booklet, "Packaging Manual for Self-Service Meats," now being distributed by the Pliofilm department of Goodyear Tire & Rubber Co.'s films and flooring division. The manual tells and shows how to apply Pliofilm wrapping to all types of meat cuts with the least expenditure of time, effort and material. Facts on pre-packaging costs were obtained from an analysis of five different supermarkets in five different regions of the country. Included in the manual are blueprints of recommended equipment, layouts and floor plans for packaging rooms. Copies of the booklet may be obtained on request to the Goodyear company, Akron 16, Ohio.

Dr. Fred Olsen, vice president for research and development of Olin Industries, Inc., has been elected president of the Industrial Research Institute, Inc. Allen Abrams, vice president of Marathon Corp., was elected vice president and C. G. Worthington was re-elected fulltime secretary-treasurer. Newly elected board members are: L. B. Hitchcock of the National Research Laboratory, Inc., and H. G. Vesper of the California Research Corp. The elections were held during the recent 15th annual meeting of the IRI. Theme of the meeting, which was led by Dr. Olsen, was "The Stimulation of Creative Thinking." The 1952 Medal of the Institute, awarded for outstanding accomplishments in the management field of industrial research, was presented to Dr. Roy Newton, vice president of Swift & Co., for pioneering in long-range research on food products and for his vigorous leadership in leading industry to high standards of public service.

The Fibre Drum Mfrs. Assn. at its recent annual meeting elected the following new officers: C. E. Eggerss of Continental Can Co., Inc., president; A. J. Godshalk of the Fibre Drum Co., vice president; R. F.

Gumbert of Plyfiber Container Corp., treasurer. H. L. Carpenter of the Carpenter Container Corp. was re-elected a director. Glenn Mather continues as secretary of the association, with head-quarters at 100 E. 42nd St., New York 17, N. Y. Principal speaker at the meeting was R. E. Canfield, whose theme was the need for better working relationships between government and industry.

A new Directory of manufacturers of steel shipping containers, covering over 90% of the national production, has just been issued by the Steel Shipping Container Institute, Inc., 600 Fifth Ave., New York 20, N. Y. In addition to listing manufacturers, plant locations and types of containers manufactured, the Directory contains factual data on annual production of the various types of containers, utilization by industries and other statistics, and traces the development of the industry to the present time. The Institute-sponsored program of research and development and other current projects being carried out are outlined.

Walter J. Ash of Consolidated Lithographing Corp. has been named chairman of the executive committee of the Point-of-Purchase Advertising Institute, New York, for the coming year. Other members of the organization's executive committee for the coming year are: Howard M. Cowee, W. L. Stensgaard & Associates; Harry Fenster, I. Fenster & Sons; Paul Godell, Avery Corp.; King Gould, executive director of POPAI; William M. Harris, Harris Associates; George P. Hughes, Kindred, MacLean & Co.; John M. Palmer, Palmer Associates; William L. Stensgaard, W. L. Stensgaard & Asso-

What's doing

July 13-18-National China, Glass & Pottery Show, Hotel New Yorker, New York.

July 27-31-National Assn. of Variety Stores, Chicago.

July 28-Aug. 8—Chicago Gift Show, LaSalle Hotel and Palmer House, Chicago.

Aug. 12-14—Western Packaging & Materials Handling Exposition, Shrine Convention Hall, Los Angeles.

Aug. 17-23—American Pharmaceutical Assn., Philadelphia.

Aug. 18-22—New York Gift Show, Hotel Statler and New Yorker, New York.



Makes bag... Fills...Seals...!

Here is the cost saving, streamlined way to package your product for maximum economy and plus sales!

Base machine makes a pouch style bag, opens it for filling, eals it, and discharges a completed package. Design allows for selection of the best filling equipment available for your product. Special feeders for unusual items. Standard unit makes bags from heat sealing papers, foils, cellophane, laminations, etc.

Whether your product is liquid, powder, solid, multiple items, or requires packaging under nitrogen gas, the Bartelt Machine will handle your needs.

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PerfeKtum AMPWASH

MODEL GW-12

This ampul washing machine is a recent development which

permits the user to employ a unique loading technique. The so-called "box dumping method" is used. The operator removes the ampuls from the glass manufacturer's box and transfers them, one gross at a time, directly into the machine. By eliminating the customary individual handling, 40 gross of ampuls per hour can be washed.

The Model GW-12 is one of a famous group of special pharmaceutical machines in use throughout the world. Send for the 1952 PerjeKtum Catalog, Address DEPT. MP.

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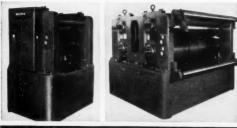




Coater Laminator for paper and fail

Tripley Board Laminator

Laminators for every purpose



Single Embosser

Double Embasser

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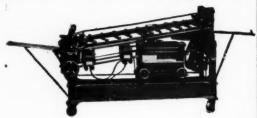
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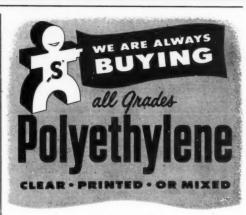




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Executives and technicians representing 40 paper converting companies met recently at Bedford, Pa., for a reinforcedpaper conference sponsored by Owens-Corning Fiberglas Corp. At the close of the conference, the company announced that it plans to make the conference an annual event. The program included a demonstration by F. A. Mennerich of the Fiberglas laboratory at Ashton, R. I., of the characteristics of glass textile yarns as reinforcing fibers and a discussion by J. K. Park, manager of research and development for Fiberglas textile products, on the development of new glass fibre products for paper reinforcement.

The newest addition to The Hinde & Dauch Paper Co.'s "Little Packaging Library" series is a revised edition of the data book, "How To Ship By Air In Corrugated Boxes." Designed to aid manufacturers ship more effectively and economically by air, the volume contains up-to-the-minute information on proper use of air express, air freight, air parcel post and combination service. It cites current regulations in accordance with recent postal changes and contains a special loading chart to provide a quick check for estimating maximum sizes and weights accepted for air shipment. Copies of the booklet may be obtained on request to The Hinde & Dauch Paper Co., Sandusky, Ohio.

A new edition of F & L Standard Colors formulated for offset printing has just been issued by the Fuchs & Lang Mfg. Co., Division of Sun Chemical Corp., 10th St. and 44th Ave., Long Island City 1, N. Y. The 68 standard colors shown were lithographed on both offset and coated stock. The index includes complete characteristics of each ink, its name and number. Use of the catalog, according to the company, saves time in ordering ink requirements.

Nearly 250 exhibitors will be represented at the seventh National Chemical Exposition to be held in the Chicago Coliseum, Sept. 9 to 13, and attendance is expected to exceed the record 20,000 visitors of 1950. The Centennial of Engineering is being celebrated at the same time by a group of engineering societies. Special programs to be presented include a symposium in which leaders in major fields of chemistry will talk on prospective developments for the world's progress in



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their special fields and a symposium on industrial uses of atomic energy.

The Commerce and Industry Assn. of New York has called to the attention of the packaging industry two new bills introduced in the New York City Council designed to impose 3% sales and use taxes on containers and wrapping and packaging materials: Int. No. 681 (Sales Tax) and 682 (Use Tax). Date of the public hearing on these bills is expected to be announced shortly. The association points out that prompt action is required to organize an effective protest against these proposed taxes. A mass protest spearheaded by the association resulted in abandonment of a similar attempt to impose such taxes in 1949.

Canada's First Packaging Exposition and concurrent 2nd Annual Conference has been scheduled for Oct. 21-23, in the East Wing of the Toronto Coliseum in the Canadian National Exhibition grounds. More than 160 booths occupy the 20,000 sq. ft. of exhibit space. There will be more than 100 Canadian exhibitors of packaging services, materials, containers, packages, machinery and materialshandling equipment, and a good representation of U. S., U. K. and European manufacturers is expected. General chairman is H. S. Romani of Christie, Brown & Co., Ltd., Toronto, and vice chairman is D. V. Reddick of The T. Eaton Co., Ltd., Toronto. The Conference will be keved to Canada's mounting industrialization. Special features of the Conference include exhibits of all entries in the two competitions sponsored this year by the Canadian Package Design Committee of the Packaging Assn. of Canada. Admission to the Exposition will be by invitation ticket; only PAC members and the exhibitors will be furnished with tickets for sending out these invitations. PAC headquarters for the Exposition, Conference and Annual Banquet will be maintained in both the Coliseum and the King Edward Hotel

The Toilet Goods Assn., Inc., elected the following officers at its recent 17th annual convention: Davis Factor of Max Factor & Co., president; Jean Despres of Coty, Inc., vice president; J. A. Ewald of Avon Products, Inc., vice president; C. T. Lipscomb, Jr., of the Pepsodent Div., Lever Bros. Co., vice president; H. J. Lehman of Wildroot Co., vice president; William F. Denney, Jr., of Frances Denney, secretary; Philip C. Smith of Yardley of London, Inc., treasurer. Directors elected for a three-year term are Robert B.

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GUMMED BOX STAYS. Folder contains specifications and five representative samples of "Knowco" gummed box stay for use in the manufacture of set-up boxes. M.

TAMPER-PROOF AND SCREW CLOSURES. Folder with numerous application photos showing how "Filma-Seal" closures and regular screw caps are used to protect various products from leakage, evaporation, air and moisture exchange, and tampering. Ferdinand Gutmann & Co.

ENGRAVING GRAVURE CYLINDERS. Booklet explains and illustrates the many steps involved in transforming artwork into a finished, polished, rotogravure printing cylinder. Southern Gravure Service, Inc.

VACUUM FEED LABELING MACHINE, Bulletin explains the features and operation of the Mercury "Vacumatic" heat sealing and labeling machine which feeds, folds and seals label and bag in one automatic operation. Mercury Heat Sealing Equip-

GUMMED TAPE PRINTER. Details on the "Tape-Printer" for printing advertising messages, inventory data, and other information on gummed tape as it is run through an automatic tape machine. American Tape Printer Co.

CUSHIONING MATERIAL. Details on "Cellulines," a new interior packaging cushion-ing material with four times the packag-ing protection of creped wadding. The Gliman Brothers Co. (6-256)

PRODUCE PACKAGING DATA. Basic information on pre-packaging fruits and vege-tables. Explains selection of package form, package material and package de-sign. Milprint, Inc. (6-257)

SLITTING CELLULOSE FILM. Booklet trouble-shoots many of the difficulties normally encountered when slitting cellulose film and suggests methods for avoiding them. British Cellophane Ltd. (G-258

BOTTLE LABELING. A discussion of label specifications, adhesives, thermoplastic labeling machinery, and labeling difficulties and how to overcome them is contained in this booklet. National Adhesives, Div. of National Starch Products Inc.

PHOFILM LINED BAGS. Leaflet describes "Kard-O-Pak," a self opening, flat bottom bag with a protective "Pliofilm" liner for packaging foods, chemicals, drugs, and similar products. American Bag & Paper Corp. (6-240)

"KIMPAK" FOR COSMETICS AND SOAPS. Folder lists the advantages of using "Kim-pak" creped wadding for the protective packaging of cosmetics and soaps. Kimberly-Clark Corp.

PACKAGING AND SEALING TABLE. Folder describes advantages of a new, heavy-duty, marble top table with an inset hot plate for sealing any plastic film packages. Cleveland Lathe & Machine Co. 10-262)

VARIABLE SPEED TRANSMISSIONS. Bulletin tells about the "Fra-sure" variable speed transmission for speed control of fractional horse power motors which run packaging machines. Frazier & Son.

TUBE FILLERS. The major items in the Colton line of automatic, semi-automatic, and hand-operated tube fillers and closers, and can and capsule fillers are described in a broadside folder. Arthur Colton Co.

TRANSPARENT PLASTIC CONTAINERS. Catalogue illustrates many styles of drawn and fabricated sheet acetate containers and explains the methods of decorating them. Includes complete price list. Weinman Brothers, Inc. (62-265)

PACKING GRADE FOAMABLE RESIN. Booklet describes an extremely light weight foamed phenolic resin which is suggested for re-duced packing time and superior protec-tion from breakage. Bakelite Co., Div., of Union Carbide and Carbon Corp. (G-266)

CARTONERS. Bulletin briefly describes the Jones fully automatic and semi-automatic cartoners and gives a partial list of users of the fully automatic cartoner. R. A. Jones & Co., Inc. 10-2671

FILLING MACHINE AND ATTACHMENTS, Described is the fully automatic, high speed "Fillmaster" filling machine used for dry and semi-dry products. Also included are details about various attachments. Stuyvesant Engineering Co.

PACKAGING MANUAL FOR SELF-SERVICE MEATS. Complete handbook on the subject covers the dollars and cents aspect of pre-packaging meats, the technique for using "Pliofilm" properly for various cuts, film recommendations, merchandising him recommendations, merchandising suggestions, efficient packing room lay-outs, and all other pertinent details. The Goodyear Tire & Rubber Co., Inc. (G-269)

BAGGERS. The Anderson Model 184 bag-ger used for the handling of small paper bags and the Model 184 bagger are both presented in this bulletin. Frice list included. Anderson Brothers Mfg. Co.

TRANSPARENT PLASTIC BOXES. Folder contains illustrations and dimensions of a large assortment of clear polystyrene stock boxes. Price list included. Bradley

CELANESE ACETATE SHEETING AND FILM. Brochure gives sizes, colors, physical and thermal properties, formulations, applications, and forms available for Celanese acetate sheeting and film. Celanese Corporation of America. (6-272)

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SEALING AND BONDING RUBBER PLATES. Bulletin contains specifications and directions for use of several cements and tapes which are used in adhering rubber plates to cylinders. Mostype Corp. (6-273)

PAPER MAKING AND CONVERTING MA-CHINERY. Bulletin illustrates and describes complete line of stock preparatory, paper forming, and paper converting machinery manufactured by this company and its various divisions. The Black-Clawson Co. 16-274

CORRUGATED BOXES AND PACKING MATE-BIALS. Descriptions and illustrations of various types of standard corrugated boxes and packing materials together with full page chart for the selection of corrugated specialty boxes. Hinde & Dauch Paper Co. (6-273)

AUTOMATIC FILLERS AND TOP AND SOTTOM BALERS. Complete specifications, features, and descriptions of operations of "Packonatic" carton fillers and top and bottom sealers are given in this illustrated bookset. Floor plans for the combination of various machines are included. J. L. Fermuson Co.

CAN FILLERS. Bulletin on "Pfaudler-King" illers for filling all free flowing products, but or cold, foaming or non-foaming, into all standard size cans. The Pfaudler Co.

"STREAMLINER" GRAVITY BOLLER CONVEY-ORS. Bulletin illustrates and describes the features of the many types of gravity roller conveyors for packing and material handling which are manufactured by Harry J. Ferguson Co. (6-278)

BOTTLE AND CAN PACKERS. Advantages, operation, uses, and other information on the 830 Packer series is presented in an illustrated booklet issued by Standard-Knapp, Div. of Emhart Mfg. Co. (6-279)

WEIGHING MACHINES. Features, uses, specifications, operational data, and other important information is given on weighing machines for batching, packaging, bagging, feeding and compounding as produced by The Exact Weight Scale Co. 89.3801

"TRANSWRAP" FOR LIQUIDS. Folder explains the operations and advantages of packaging and marketing liquid products in the pillow type packages which are automatically made and filled on "Transwrap" machines. Transparent Wrap Machine Corp. (6-281)

PROPER SEALING WITH GUMMED TAPE. Wall chart for shipping room which describes storage methods, care of automatic dispensers and proper methods for applying gummed tape to achieve maximum package protection. The Gummed Industries Association. (0-282)

PLEATER FOR FILM. Description of two machines which pleat cellophane and other film and apply it as a wrap to cylindrical objects. Charles E. Douglas & Co. Ltd. 10.281

BOTTLE TOPS, "Alcoa 'Hytops'" for screwtopped bottles and the machine for automatically forming the closure threads on the bottle are described in a bulletin issued by Aluminum Co. of America.

"ECO" CONTAINERS. Bulletin discusses the features of an air-tight, sift-proof paper package which is formed, filled and sealed automatically at high-speed and is suitable for frozen foods and other applications. Alfred Hofman & Co. (G-285)

INKING ROLLS. Details on "Evenfio" ink rolls and "No-Flex" plate rolls for aniline printing. System of operation, advantages, and features are included. Paper Machinery and Research, Inc. (G-286)

LIQUID GRAVITY FILLERS. The features and specifications of Perl fillers for containers from quarts to five gallons are covered in a folder issued by Perl Machine Mfg. Co. (G-287)

TABLET INSPECTION UNIT. The "hows" and "whys" of a machine for eliminating manual handling of tablets during inspection prior to packaging. The Lakso Co., Inc. (6-2as)

COLORED INDUSTRIAL TAPES. Fourteen varieties of industrial tapes are shown in folder on "Scotch" brand pressure-sensitive tapes. Uses of eight different colored tapes are given. Minnesota Mining and Manufacturing Co. (6-289)

LABEL PASTERS. Descriptions and specifications of Potdevin hand and motor driven labelers are given in this bulletin issued by Potdevin Machine Co. (G-290)

MARKING MACHINE FOR PHARMACEUTICALS. Folder describes the Model 20 A marking machine designed to imprint on cylindrical objects such as vials and ampules. Markem Machine Co. (G-291)

DEVELOPMENTS IN FLUORESCENCE. House organ gives latest application data on the use of "Day-Clo" fluorescent materials in packaging and other applications. Switzer Brothers, Inc. (6-292)

LABELING IDEAS. Brochure contains hundreds of suggestions on sizes and styles of labels for packaging and shipping.

Ever Ready Label Corp. (6-293)

LIQUID FILLING MACHINES. Folder describes several semi and fully automatic vacuum and gravity fillers for all types of liquids. MRM Company, Inc. (6-294)

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Brown of Bristol-Myers Products Co.; C. W. Godefroy, Godefroy Mfg. Co.; Harry Haus, George W. Luft Co.; Lessing L. Kole, Kolmar Laboratories, Inc.; John Hudson Moore, John Hudson Moore, Inc.; Martin Revson, Revlon Products Corp. To fill the vacancy as a director left by the election of Mr. Lipscomb as vice president, J. G. Bell of Bonne Bell, Inc., was elected. Directors representing associate members, elected for a one-year term, are Peter L. Forsman of C. H. Forsman Co. and M. Lemmermeyer of Aromatic Products, Inc.

An eight-page booklet titled "Bakelite Foamable Resin-Packing Grade," recently published by Bakelite Co., a Division of Union Carbide & Carbon Corp., describes the advantages and methods of packing objects in foamed Bakelite phenolic plastic. Savings in postage and breakage, and reduction in packing time and workers' fatigue are cited as advantages. A production-cost analysis and a postal savings comparator table suggest some of the economic benefits of the material. The booklet also describes the properties and process of foaming the resin for packaging purposes. Copies may be had from Bakelite Co., 300 Madison Ave., New York 17, N. Y.

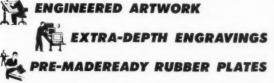
A new book for the paper chemist which covers a wide range of converting operations as they must be understood by those responsible for the basic papermaking operation is now available. It is "Pulp and Paper, Vol. II," by James P. Casey (Interscience Publishers, Inc., 250 Fifth Ave., New York; \$18.00). The new 608-page book forms a logical sequel to Vol. I, which dealt with pulping and papermaking. The author is director of technical service, A. E. Staley Mfg. Co., Decatur, Ill. The book is a valuable text and reference work for chemists and all concerned with paper buying, selling or use.

"Techniques of Plant Maintenance—1952" contains a cross-section of current industrial engineering thought on maintenance problems, as revealed in papers and discussions heard at the annual Plant Maintenance Conference and Show. The 182-page book contains the proceedings of the conference, plus a manual for a lower repair and maintenance cost program prepared by Westinghouse Electric Corp. The volume is being sent free to all who attended this year's conference and is available postpaid for \$6 from the firm which managed the show, Clapp & Poliak, Inc., 341 Madison Ave., New York 17.



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U.S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Edited by H. A. Levey

Knockdown Box and Crate, C. H. McGrath, New York, and R. L. Webster, Elmhurst, N. Y. U. S. 2,593,779, Apr. 22. A knockdown container comprising container body members, a top cover member secured at its opposite ends to the container body members by releasable fastenings that serve unaided as the only fastenings for same and consist of engaging tongues and grooves.

Rotatable Cap-Applying Chuck With Cap-Gripping Helical Spring, M. S. Resina (to Resina Automatic Machinery Co., Inc., Brooklyn, N. Y.). U. S. 2,593,794, Apr. 22. A rotating capapplying chuck, said chuck comprising a body member having a socket formed therein, including a cylindrical wall portion.

Transparent Tray-Like Structure, F. D. Bergstein, Cincinnati, Ohio. U. S. 2,593,834, Apr. 22. A self-sustaining box or tray assembled from three preformed units, each of said units consisting of a three-piece assembly in which each piece is a separate panel of non-scorable plastic sheeting and in which the panels of each assembly are hingedly articulated together along parallel lines.

Shipping Container, W. R. Kohl, Glenview, Ill. U. S. 2,593,895, Apr. 22. A container comprising a blank of relatively stiff material folded to define bottom, a pair of side walls flexibly conjoined to opposite margins of the bottom, a pair of cover members flexibly conjoined to side walls and a pair of flaps on cover members positionable in parallel, longitudinally extending relation to depend internally of and at least partially subdivide the container interior.

Clasp-Type Closure For Envelopes, G. H. Matthlesen, Chicago, Ill. U. S. 2,594,050, Apr. 22. An envelope having a body and a closure flap provided with a hole, a substantially rectangular blank having an adhesive coating on one side and a metallic clasp having an enlarged head engaging the adhesive-coated side of the blank and having a pair of spaced prongs extending through slits in the blank.

Powder Container, R. E. Thompson (to Armour & Co., Chicago, Ill.) U. S. 2,594,093, Apr. 22. A capsule for holding medicinal powder comprising a container member and a cap therefor, one of members containing a pair of small apertures and a thread removably passed through said apertures successively, the ends of said thread being outside the capsule, the thread being operative to seal off said apertures and prevent the escape of powder therethrough.

Device For Controlling the Filling Of Containers, R. E. Fowler, Watkinsville, Ca. U. S. 2,594,146, Apr. 22. In a device for controlling the flow of fluid into a container, a housing provided for the passageway for the egress therethrough of fluid, said housing having a channelway arranged at right angles with respect to said passageway to said channelway.

One-Piece Reinforced Carton, R. Guyer (to Waldorf Paper Products Co., St. Paul, Minn.). U. S. 2,594,156, Apr. 22. A carton comprising two foldably connected sections, one section including a bottom panel and a rear wall panel, and the other section including a top panel and a front wall panel, end flaps at each end of said panels, the end flaps at each end of said panels, the end flaps at each end of said panels, the rear flaps surface contact with the corresponding end flaps of the rear wall panel, end flaps to top panel being arranged in overlapping surface contact with the corresponding end flaps of front wall panel, and means securing the overlapping end flaps of foach section together to hold the bottom panel and rear wall panel in right angular relationship and to hold top panel.

Method Of and Apparatus For Producing Valved Or Sleeved Bags, H. E. Lee (to St. Regis Paper Co., New York, N. Y.), U. S. Re: 23,486, Apr. 29. In forming a sleeve valve bag, the steps which comprise separating the walls of the open end of a

bag adjacent one corner of the bag, introducing between the separated walls a spreader and moving the spreader in a diagonal direction into the bag until the corner of the bag is substantially straightened against the spreader.

Pallet Container Assembly For Shipping Articles, L. J. Budd, (to Pallet Devices, Inc., Melrose Park, Ill.). U. S. 2,594,287, Apr. 29. A palletized package of apertured articles embodying therein a pallet including a platform and supporting members on the underside thereof and arranged for the entry of lift-truck arms between certain ones thereof.

Tape Dispenser and Applier, T. H. Krueger and E. E. Sharpe (to Better Packages, Inc., a corporation of New York). U. S. 2,594,316, Apr. 29. In an electrically operated tape dispenser and applier, tape-feeding means comprising a reciprocating tape gripper and means for reciprocating said gripper through a predetermined range of movement.

Bottle Carrier, E. L. Arneson (to Morris Paper Mills, Chicago, Ill.). U. S. 2,594,376, Apr. 29, and U. S. 2,594,377, Apr. 29. A collapsible carrier for bottles or like articles comprising a pair of upstanding side walls connected to one another by a medially bendable bottom, an upstanding multi-ply panel paralleling and between side walls, end walls flexibly conjoined to opposite end margins of side walls and panel being interleaved with the plies of the latter, cross partitions cut from the material of side walls and panel and positioned normal thereto in the crected condition of the carrier cross partitions being connected by vertical hinges to side walls.

Carton, R. C. Casselman and D. R. Dominie (to Polaroid Corp., Cambridge, Mass.). U. S. 2,594,394, Apr. 29. A collapsible carton comprising a pair of walls, one of said walls being a front wall and the other being a rear wall, two end walls, front, rear and end walls being joined together, scores at the junctions between walls, a top closure including a portion forming the carton top wall.

Box Construction, W. Evans (to California Container Corp., Emeryville, Calif.). U. S. 2,594,628, Apr. 29. A unitary assembly of box trays comprising a plurality of individual box trays each having a bottom, side walls and end walls, the end walls being of greater height than the side walls and each including an inner end wall and an outer end wall in spaced relationship to each other and joined by a bridging wall.

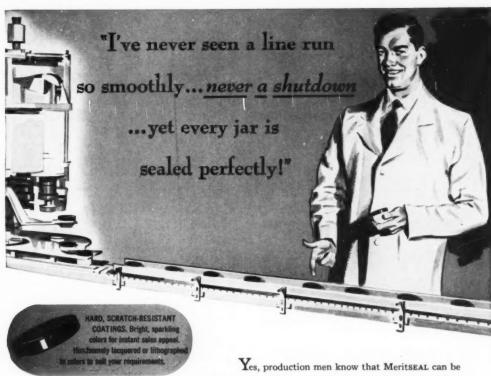
Device For Automatically Stripping Cut-Out Box Blanks From Offal Or Waste, H. A. Ringel, New Orleans, La. U. S. 2,594,804, Apr. 29. In a device for automatically stripping cut-out box blanks from waste, a pair of hollow oppositely rotating cylinders disposed with a nip therebetween of the approximate thickness of the cut-out sheet of cardboard having the box blank and waste material, said cylinders each comprising perforated and imperforate part-cylinder sections, the pattern on one cylinder conforming to the box blank and the pattern on the other cylinder to the waste.

Apparatus For Manufacturing Valve Bags, D. Belcher, R. J. Williams and J. E. Voege (to Bemis Bro. Bag Co., St. Louis, Mo.). U. S. 2,594,849, Apr. 29. Apparatus for manufacturing valve bags comprising a conveyor including a bag-spreading device adapted to receive and carry a bag body having a valve notch and to spread flat the valve-notch corner thereof, said conveyor being adapted to move a spread bag body carried by said device in a predetermined path.

Partition-Assembling Machine, R. J. Hicken, Rittman, Ohio. U. S. 2.594,924, Apr. 29. In a partition-assembling machine, means defining an assembling station and means for feeding two sets of partition strips thereto for relative assembly in cellular arrangement, one of feeding means including a holder for a plurality of partition strips.

Carton Filling and Weighing Machine, F. M. Willbrandt (to Battle Creek Bread Wrapping Machine Co., Battle Creek, Mich.). U. S. 2,595,035, Apr. 29. A carton filling and weighing machine comprising a conveyor having a continuously driven conveyor belt, a scale having a pan positioned intermediate of conveyor ends, arranged to lift carton to be filled off said belt.

Merchandise Package, R. C. Zimmerman (to Zimmerman Packing Co., Norwood, Ohio). U. S. 2,595,043, Apr. 29. In a









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U.S. patents digest

merchandise package, the combination of a flexible bag of suitable length and breadth having a front and back of substantially equal length, a closed end and an open end, a stiff insert within the bag between the front and back thereof of a width substantially equal to the width of the bag and having one end of the insert against the closed end of the bag.

Method Of Forming Paper Closure Members For Paper Containers, W. E. Amberg 'to Lily-Tulip Cup Corp., Chicago, Ill.). U. S. 2,595,046, Apr. 29. The method of making a paper closure member for a paper container comprising the steps of forming a paperboard blank into a closure end-wall portion and an integral peripheral side-flange portion, confining the end-wall portion and a part of the flange portion remote from the juncture of the end wall and flange portions so as to leave an intermediate zone of flange portion relatively unconfined.

Pressure-Sensitive Tape Dispensing Machine, A. L. Dixon, H. W. Gore and J. W. Rice (to Western Electric Co., Inc., New York, N. Y.). U. S. 2,595,060, Apr. 29. A dispenser for tacky tape comprising a base, a feed wheel rotatably mounted on base and having a plurality of spaced-apart, tape-supporting surfaces for feeding tape adhered to said surfaces.

Container, E. A. Pardee (to Shellmar Products Corp., Chicago, Ill.). U. S. 2,595,202, Apr. 29. In a shipping and dispensing container formed from a blank of cut paperboard material laving crease lines defining panels secured together to provide when erected collapsible upright front, back and side walls and top and bottom wall members hinged thereto, the improvement comprising a partition-forming section cut from an intermediate partion of the front and side walls and folded toward the back wall when the container is erected.

Valved Bag and Its Manufacture, C. V. Brady and A. F. Ottinger (to Bemis Bro. Bag Co., St. Louis, Mo.). U. S. 2,595,446, May 6. The method of making a valved bag comprising folding a rectangular blank along a side fold line to form rectangular front and back walls joined at side fold line and having top edges, unfolding the top edge of one wall from the top edge of the other wall along a second fold line to form a triangular valve flap.

Method and Apparatus For Filling and Packing Containers, F. B. Fishburne, Ashville, N. C., C. H. Hinnand, Jr., Richmond, Va., and T. A. Ricks, Durham, N. C. U. S. 2,596,018, May 6. The method of filling a cylindrical container with loose fibrous material which comprises rotating such container in a vertical position about its own axis, delivering a stream of material tangentially into upper end of container at a point adjacent the wall thereof, so that such material is deposited mainly in an annular zone.

Cap-Making Machine, R. Sonnenberg (to Mid-West Bottle Cap Co., Belvidere, Ill.). U. S. 2,596,030, May 6. The combination in a machine for forming bottle caps from thin strip stock, comprising cooperating bottle-cap blanking and forming die elements disposed to have said strip feed thereto vertically.

Tube-Cutting Machine, N. D. Abbey (to The Etna Machine Co., Toledo, Ohio). U. S. 2,596,062, May 6. A tube cutter comprising a support, a tube channel on support, a head rotating coaxially about said tube channel, means for rotating said head, a plurality of cutting tools and carriers mounting said cutting tools on head and rotating therewith.

Tape Dispensing, S. B. Lindsey (to Minnesota Mining & Mfg. Co., St. Paul, Minn.). U. S. 2,596,158, May 13, A pressure-sensitive adhesive tape dispenser having means for holding supply of tape, means for temporarily anchoring a previously withdrawn unsevered length of tape against retraction and movable roller member for withdrawing additional tape from the supply by movement through a tape-withdrawing stroke.

Partitioned Tray Or Holder, K. T. Buttery (to Sutherland Paper Co., Kalamazoo, Mich.). U. S. 2,596,205, May 13. A partitioned holder or tray comprising bottom member hingedly connected at its bottom edge to the inner edge of one bottom member and having spaced cut edges extending downwardly from its upper edge providing a central swingable strap-like hinge.

Paper Container, W. A. Eaton and R. S. Sanford (one-half to Ex-Cell-O Corp., Detroit, Mich., and one-half to Ace C. Fessenden and Ace Carton Corp., Chicago, Ill.). U. S. 2,596,224, May 13. The method of closing an open end of a tubular container of rectangular cross section, provided with foldable end

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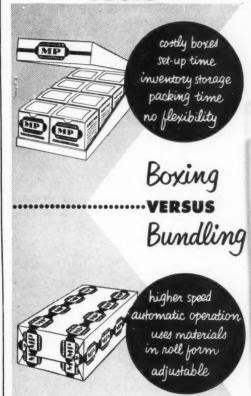
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U.S. patents digest

flaps integral with the walls of the container, and of directing and flowing an adhesive toward the corners and edges of the container end to seal all openings therein.

Container, W. A. Eaton (one-half to Ex-Cell-O Corp., Detroit, Mich., and one-half to A. C. Fessenden and Ace Carton Corp., Chicago, Ill.). U. S. 2,596,225. The method of forming a substantially flat end closure for a polygonal tubular container of sheet material having an even number of side walls, which comprises scoring and cutting the material to provide at least one foldable end-closing flap integral with one of the side walls.

Carton, L. D. Liskin (to Standard Corrugated Case Corp.).
U. S. 2,596,261, May 13. A fibrous carton rectangularly shaped, said carton comprising a bottom member, opposite sides of bottom member having integral front and rear wall members, the upper edges of rear and front wall members having coversection extensions forming the outer layer of a double-wall closure.

Container and Corner-Locking Means Therefor, I. G. Witte (to W. I. Evans and E. Blanco, Los Angeles, Calif.). U. S. 2,596,32%, May 13. A frame construction comprising a horizontal member having a hole therethrough, said hole having sections of two diameters and side openings through the edge of member, the perpendicular distance between the edges of openings being less than the diameters of said sections.

Apparatus For Loading and Unloading Jars Into and Out Of Containers, G. Lufkin (to Owens-Illinois Glass Co.). U. S. 2,596,339, May 13. Apparatus for use in packaging jars or like containers which are packed in cases, each case having a top comprising side and end flaps foldable back for opening the case, said apparatus comprising a horizontal platform mounted for up-and-down bodily movement vertically, means for holding case stationary in an inverted position over and in register with the platform.

Severable Multiple-Unit Case, K. C. Ferguson (to Inland Container Corp., Indianapoiis, Ind.). U. S. 2,596,331, May 13. A one-piece divisible carton of a single blank having two halves integrally connected together for a portion of said halves and initially separable for the remaining portion.

Means For Screw-Tightening Caps On Jars By Frictional Pressure Which Diminishes As Tightening Proceeds, F. J. Johnson, F. J. Johnson, Jr., and R. L. Johnson (to The Kinex Co., Needham Heights, Mass.). U. S. 2,596,408, May 13. In a jar-capping machine, the combination of a conveyor for feeding a series of open-top jars through a capping station and means for feeding a series of jar caps in a line to said capping station.

Box, P. Myers, Baltimore, Md. U. S. 2,596,426, May 13. A container having two plane end members forming opposite parallel ends thereof, each member having an outer section with a peripherally projecting collar section and an inner frustum of pyramid section, with the pyramid bases being directed inwardly.

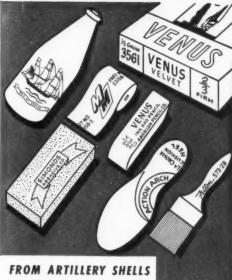
Web-Feeding Mechanism For Package-Forming Machines, J. G. Vergobbi (to Pneumatic Scale Corp., Ltd., Quincy, Mass.). U. S. 2,596,624, May 13. A forming block, a feeding mechanism comprising a pair of intermittently operated feed rolls arranged to advance a perdetermined length of a web of a container-forming material, folding means upon which the advanced portion of the web is supported, to be subsequently folded about the block, and means for maintaining said advanced portion in a fully extended condition and in operative relation to folding means.

Box, H. L. Metzger, Castleton-on-Hudson, N. Y. U. S. 2,596,707, May 13. A cylindrical box formed of flexible material and comprising a container having an upstanding side wall and a cover having a depending side wall adapted to fit over the side wall of said container; side walls of container and cover, respectively, each being formed of a single, elongated strip of material flexed into cylindrical form with overlapped ends.

Material-Inserting Machine, H. E. Gantzer (to Consolidated Packaging Machinery Corp., Buffalo, N. Y.). U. S. 2,596,813, May 13. In a machine for inserting individual lengths of fibrous material into the necks of bottles, a main frame, means supported on frame for feeding a continuous strand of fibrous material, a continuously rotating transfer wheel located adjacent feeding means and adapted to support free end of strand after it leaves feeding means, feeding means being interrupted at periodic intervals whereby successive individual lengths of fibrous material will be broken therefrom.



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The growing line

(This article continued from page 114) out that will allow gradual increases in output as distribution broadens.

Odell is basing these flexible plans on the reserve capacity of the equipment, which the equipment manufacturers rate as follows:

- 1. Filler-150 per min. (pints)
- 2. Capper-60 per min.
- 3. Labeler-45 per min.
- 4. Cartoner-60 per min.

The filler limits speed attainable at present primarily because of the foaming qualities of Trol and a restricted bottle opening. Present plans call for replacement of one of the filler's two-stage foam-settling chambers with a pipeline and pump to return foam to the main tank upstairs. This will permit operation at somewhat higher speeds.

In the meantime, the major problem—requiring an investment in planning time rather than in equipment is scheduling of the runs.

The multiplicity of products packed (12 in all) is a key problem because of the wash-up requirement. Fixed hot and cold water lines are brought directly to the bottler to speed up this operation and present flexible hose lines from the mixing floor above will shortly be replaced by sanitary coupled stainless piping, with plans for eventual duplication of lines so that a change-over in product being bottled can be made during a work day with no wash-up needed at that time.

One of the company's products, the recently introduced Hair Trainer, is being bottled without any interruption of Trol production whatever. This new product, a non-greasy, nonperfumed (like Trol) hair dressing, is aimed at the juvenile and parent market and is packed in a stock bottle of attractive wide-base, tapered-neck shape, in 8-oz. size. It is spot labeled with a small oval varnished label and cartoned in an unusual open-sided sleeve (see photo) which reveals the bottle's barber-shop-flavored shape. The sleeve is applied by hand. Bulk sizes of Hair Trainer, pints and quarts, are put up in a much simpler bottle to be used in refilling the 8-oz. dispenser size.

Hair Trainer is currently being bottled on Odell's old straight-line bottler, inherited from Trol's wartime days. This machine, if operated intensively, can achieve high production because, unlike Trol, the new



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product is non-foaming and because the bottles do not have the restricted sprinkler openings. Instead, the stock bottle is fitted with a plastic cap which has a sprinkler opening. The customer, on first use, removes (or pierces) the saran-coated paperboard sealer disk under the perforated cap and thereafter uses the bottler as a sprinkler.

CREDITS: Trol Hair Tonic-Automatic liquid filler, Lipac, Inc., 475 Fifth Ace., New York. Automatic screw capper, Resina Automatic Machinery Co., Inc., 572 Smith St., Brooklyn, "Pony" labeler, New Jersey Machine Corp., 16th St. & Willow Ave., Hoboken, N. J. "Ceco" cartoner, Container Equipment Corp., 24 Oriental St., Newark 4, N. J. Package design, George Reiner, 212 Fifth Ave., New York. Bottles, Pierce Glass Co., Allegheny, Pa. Metal closures, American Star Cork Co., Inc., 175 N. Ninth St., Brooklyn, N. Y.; Crown Cork & Seal Co., Eastern Ave. and Kresson St., Baltimore 24, Md. Labels, Tompkins Label Service, Frankford Ave. at Allegheny Ave., Philadelphia. Folding cartons, Empire Box Corp., Garfield, N. J. Display cartons, Pioneer Folding Box Co., Chicopee, Mass., and United Board & Carton Corp., 156 Solar St., Suracuse, N. Y. Hair Trainer-Bottles. Hazel-Atlas Glass Co., Wheeling, W. Va. Plastic closures, The Grigoleit Co., Decatur, Ill. Labels, Every Ready Label Corp., Belleville, N. J. Sleeve carton, Disbrow Mfg. Co., Inc., East Orange N. J.

No aluminum glut

I. W. Wilson, president of Aluminum Co. of America, predicted that the increases in the nation's domestic aluminum capacity, which are scheduled to boost that capacity to nearly three billion pounds a year in less than two years, will produce no surplus when the nation's economy returns to normal. We may be "scratching for more production capacity," he said, rather than worrying about what to do with too much metal. Speaking at a meeting of the New York Society of Security Analysts, Mr. Wilson reported the recent "apparent easing of the aluminum shortage" partly as a result of new productive capacity. He said that Alcoa is adding more than 50% to its pre-Korea capacity; others in the field are also adding at a rate which will leave Alcoa's share of the total domestic smelting capacity at 40%, instead of a pre-Korea 50%, of total supply. He concluded, "the market in normal times can absorb this production readily."



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ously and automatically. Proper inking — without operator attention — saves stock, ink, press down-time and operator fatigue. Using Evenflo Aniline Inking Rollers means high production quality — lower production costs.

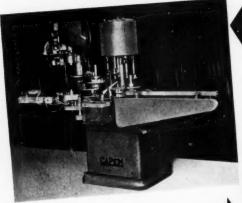
Quotations on plate, impression and special rolls supplied promptly without obligations ENLARGED VIEW OF ENGRAVED SURFACE SHOWS SCREEN THAT AU-TOMATICALLY FEEDS CORRECT AMOUNT OF INK.



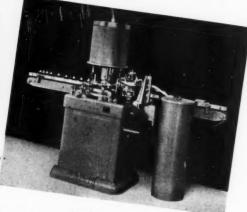
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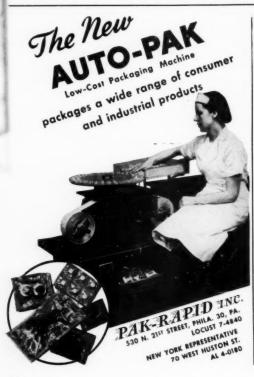


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A tiny sensing element which can be sealed up inside a vaporproof container now makes it possible to check the relative humidity inside the container or package without the costly and time-consuming process of breaking open the containers for direct examination. The sensing element has a pair of electrical leads designed to project through the vapor barrier;



Matchbox-sized sensing element, foreground, can be sealed inside the vapor barrier of the package.

connecting these leads to a portable meter gives an instant and easily read indication of relative humidity inside the package. The test can be made in a few seconds and as often as desired.

This new sensing element was developed in cooperation with the Department of Defense and tested under the direction of the Ordnance Corps. Armed Services that store costly and delicate equipment have found it a problem to insure that relative humidity in sealed packages does not exceed the critical point and many such packages have had to be opened periodically for inspection. This means costly re-cleaning and resealing. The unit is expected to minimize this.

The elements are plastic, embossed on one side with a gold leaf grid, coated with a hygroscopic film. The film changes in conductivity with changes in relative humidity and it is this conductivity that is measured by a special calibrated meter connected to the sensing element's outside leads. The element is sensitive enough to indicate presence of a half tablespoon of water in a 2,160 cu. ft. area.

CREDIT: Sensing element, Minneapolis-Honeywell Regulator Co., Minneapolis.

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SAVE TIME — II seconds was average time for sealing these cartons the "Snake Tape Way". Yet, these "TWO Strips" make a stronger closure.



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Plax patents upheld

A finding was handed down in Federal District Court in Chicago last month upholding the Plax Corp., Hartford, in its patent-infringement suit against Elmer E. Mills Corp., Chicago, involving the blow-molding method of manufacturing plastic bottles. Specifically, Judge John P. Barnes sustained the Plax claim of infringements on eight out of 11 claims in three out of four of its patents. The one patent which was cleared covers only a preliminary step in the process. In his judgment, issued later, Judge Barnes granted an injunction against further manufacture of the bottles by Mills and authorized Plax to recover unspecified damages and three-fourths of the court costs.

However, the Mills company declared immediately that an appeal would be taken to the Circuit Court of Appeals. Meanwhile, Mills has posted a \$25,000 bond to stay execution of the injuncton and announced that its production of polyethylene bottles would continue full scale to meet present orders and future commitments.

Mills contends that its method of blowing plastics differs basically from that covered by the Plax patents and further that the Plax patents are invalid because they are based on the ancient principles of glass blowing. Judge Barnes said in his opinion that he was convinced that the making of containers of glass and the making of containers of organic plastic materials are not "in the same art."

Pre-packed broccoli

Broccoli pre-packaged in transparent film bags for transcontinental refrigerated shipping retains better color, higher vitamin-C content and more moisture, according to a cooperative study recently completed by the Department of Agriculture and the Western Growers Experimental Institute. An 11-day holding period at temperatures from 34 to 44 deg. F. simulated transcontinental shipping in the tests. However, stored at 70 deg. for two days after shipment, loose broccoli and that in perforated film bags was severely vellowed, while that in non-perforated film bags developed off-odors and off-flavors. The report interprets this as showing that it pays to pre-package broccoli for refrigerated shipment.

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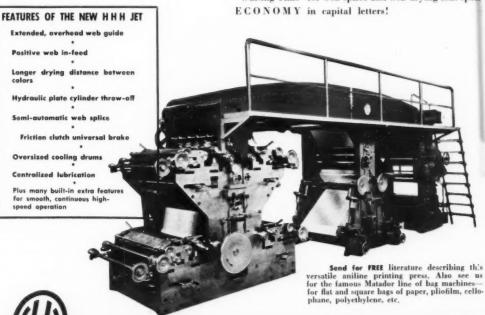
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Packaging outlook

The current level of packaging activity, says the Summer 1952 issue of Containers and Packaging Industry Report, published by the U. S. Department of Commerce, parallels to a remarkable degree the period of 1949 when container users were buying in small quantities for quick delivery and carrying minimum working inventories. This return to a buyers' market has brought about a more normal business situation, with competition again becoming intensified. With the reasonable assurance of adequate supplies of raw materials, the report points out, container manufacturers have stepped up their efforts in experiments and research to develop new products and new markets and to adapt these products to new merchandising methods and techniques.

Growing industries, such as the frozen-food field, present not only a challenge to container manufacturers, but also an opportunity of self-betterment through expanded markets, according to the report. The need for constant improvement in design, shape, size and utility of frozen-food containers, the report continues, is apparent and manufacturers who are able to meet the requirements of a "perfect" container for frozen foods, for example, will undoubtedly be adequately rewarded for initiative, foresightedness and productive ability.

Similarly, the Containers Committee of the National Assn. of Purchasing agents has prepared a report stating that the container market "has increased sales interest, with shelf appeal being used to promote consumer items." This report points out that "competition, with current sales resistance, has created the demand for new designs to secure consumer acceptance. Dual purpose, resale value, re-use and other features are being carefully examined for the packaging of many commodities in the keen competition that now exists."

Both reports call attention to the fact that the supply of containers and packaging materials is in virtual balance with present demand.

The Commerce report concludes: "Although the first-quarter 1952 started slowly for most container manufacturers as compared to similar period of last year," the outlook is favorable, with the general over-all economic level expected to be "equal to or slightly above 1951 volume."

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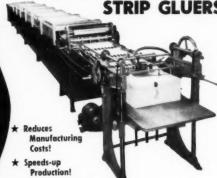
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Organoleptic-

(This article continued from page 147) member must correctly select the different sample from a series of three codemarked samples in which two are alike and one is different. He must then state which sample he prefers. It is desirable that the untrained candidates' preference shall be in agreement with the predetermined standard. Further elimination is obtained by testing ability to distinguish between differing levels of the off-aroma and off-flavor.

Examples of application

Applications of these general methods have included selection of packaging material for a chocolate product and routine control testing of all mill runs of the packaging material before printing as well as after printing. In Table I, we show some test results which were obtained during our initial screening of samples. After tests of several mill runs of each type of packaging material, commercially feasible standards of acceptance were established. The requirements for component parts of the package were dependent upon the proximity of the packaging material to the chocolate product. Careful analysis of panel-member scores from day to day served to check the reproducibility of their results. It was possible to reduce the number of panel members considerably without decreasing the reliability of the results by selection of the panel members showing the best record of performance. A brief statistical analysis of the total scores was made in order to determine the significance of the difference between mean values. For each mean value, the standard error was calculated as follows:

 $\begin{array}{l} \text{Standard error of the mean} = \sqrt{\frac{\sum d^2}{n(n\!-\!1)}} \\ \text{where } d = \text{deviation from the mean} \\ \text{and } n = \text{the number of scores.} \\ \text{The difference between two mean} \\ \text{values is considered significant if the sum of the standard errors is less than} \\ \text{the difference between the two} \end{array}$

From Table I we see that interior wrapper A, sealed with glue V and packed in boxboard B, printed with ink W, would be the most satisfactory packaging combination. The aroma and flavor quality of the exterior wrap is not as critical as other portions of the package. Therefore,



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while exterior wrap C is most satisfactory, A or B could be substituted. There is no significant difference between these latter two samples in aroma and flavor quality.

The duo-trio technique of evaluation has been used in our laboratories for evaluation of foods where only small differences are apparent. Selection of packaging material for baked dinner rolls required such a procedure. The dinner rolls were aged in contact with each of four different types of packaging materials for 48 hrs. at 90% R.H. and 100 deg. F. Each scoring session consisted of three samples; one, the rolls aged alone; second, the rolls aged with one of the packaging materials and, third, a duplicate of one of these two samples. Fifteen selections were made on each packaging material. The panel members selected the sample which they believed was different and stated their preference. The results of this test are recorded in Table II. For analysis of these results, tables of probability are available (7). These tables give the level of significance for a given number of correct selections. The smaller the level of significance, the more probable it is that there is a real difference between the samples compared.

From a study of Table II, it is obvious that sample A is very highly significantly different from the control and is not suitable for packaging the rolls. Samples C and D are of intermediate quality and sample B is most satisfactory in that it contributes no significant off-odor or off-flavor to the rolls.

The general principles outlined in this paper for evaluation of the aroma of packaging materials before contact with foods and for transfer of odors and flavors to food products can be applied to any problem where interest lies in the pick-up of odors and flavors from packaging materials. General organoleptic procedures can be applied to evaluation of any product for any sensory effect. Results of such investigations, when correlated with other physical and chemical test data, should contribute to greater consumer acceptability.

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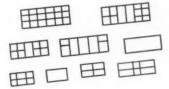
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New litho plant

Consolidated Lithographing Corp. has officially opened its new 215,000 sq. ft. one-story plant at Carle Place, Long Island, N. Y. The move climaxes



four years of planning, building and moving during which the company's engineers and consultants toured every major lithographing plant in the country. Moving from the former Brooklyn plant took seven months, during which production never fell below 75% of capacity. The new building provides the company with space for another four-color press and two new twocolor presses, which will add to the already extensive facilities for designing and manufacturing labels, displays and packaging. Other features of the plant include a private railroad spur, individual press foundations that kill vibration, humidity control in press and storage areas, and special superheaters for running synthetic finishes. Registry and spoilage problems are reported at a minimum.

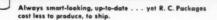


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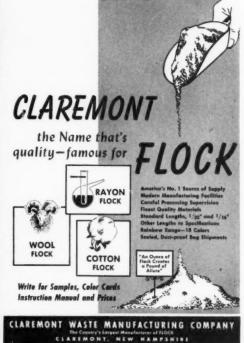
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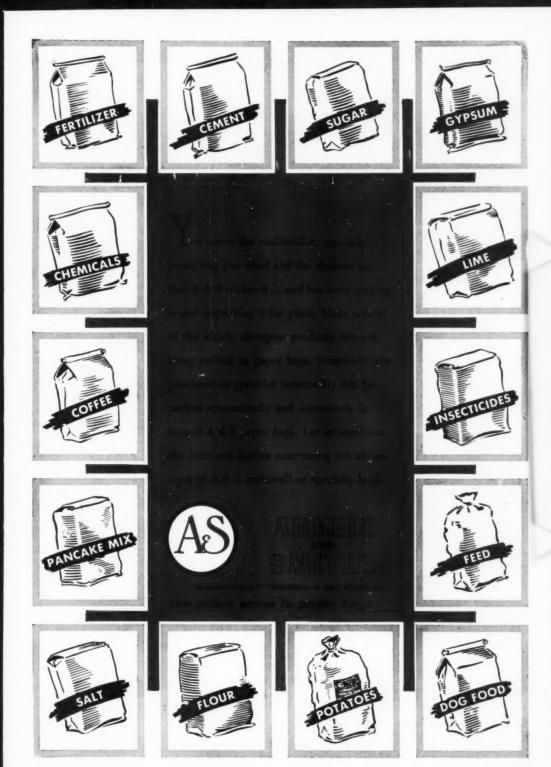
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JULY 1952



Two-case unit cheaper to handle

A two-case unit load for canned beer has greatly reduced handling costs for export shipments from the Blatz Brewing Co., Milwaukee. The photo shows the package assembly line, incorporated into the firm's shipping operation, where two 200-lb.-test corrugated cartons each carrying twenty-four 12-oz. cans of beer, are strapped together in a 20-second

operation. Two loops of %-in. steel strap, 15-gauge, are used, secured with a mounted tool which combines the tensioning, sealing and cutting operations in one action. This idea has reduced handling costs and has also cut loss from damage and pilferage.

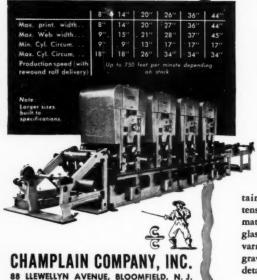
CREDIT: Steel strapping and closure tool, Acme Steel Co., Chicago.

Free design help

Confectioners and others who are bulk buyers of Walter Baker chocolate have been offered the services of a "Package Design Clinic" to analyze their retail package designs. The free counseling aid has been founded as a new phase of promotion by General Foods Corp., Inc., for its Walter Baker Chocolate & Cocoa Div., Dorchester, Mass. The company believes that this is the first such service offered by a manufacturer for its bulk-buying customers.

Package appraisal will be by a three-man panel, headed by Donald Deskey of Donald Deskey & Associates, New York. Other panel members are Fairfax Cone, president of Foot, Cone & Belding, and William R. Baker, Jr., president of Benton & Bowles, Inc., both of New York.

Bulk buyers of Walter Baker chocolate may submit two product packages per year for appraisal, after filling out a confidential application blank which asks 12 pertinent questions about the product, its market and the particular sales objectives. The panel will return a critical analysis of the package design.



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Light-weight strength

A light-weight wirebound wooden box is being used successfully as a shipping container for precision-built dentists' operating chairs by Childs Mfg. Co., Johnstonville, Ga. The company reports that it has shipped



hundreds of these high-gloss-finished chairs to all parts of the U. S. and overseas in these light-weight containers with no damage due to container failure under ordinary shipping shocks and strains.

The container, a nail-less, wraparound wirebound box, is tailored to the measure of the metal chair which is shipped fully assembled, with casters and swivel backrest in place. Packing requires only minutes for each chair. Starting with the bottom of the box, the employee places a paper-covered excelsior pad on bottom and puts chair on this. Wrap-around mat is then folded around three sides of chair and two special veneer panels are laid across the chair seat. These two panels fit snugly under a continuous cleat on the inside of the wraparound shell, as the photograph illustrates, and hold the chair firmly against hopping. They also grip between them the vertical column which supports the chair's backrest. Packing is completed by sliding the lid into place and folding the last section of the wrap-around mat into place. The mat's binding wires are twisted together to complete closure-the cleats on the mat's inner surface at top, bottom and at seat level hold the lid, bottom and special intermediate panels locked into place. Despite its apparent lightness and simplicity, the containers have proved themselves satisfactory for protection of chairs finished in high gloss nickel chrome.



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INDEX OF ADVERTISERS

The state of the s		
Acme Backing Corp	Gair, Robert, Company, Inc 1 Gardner Board and Carton Co., The	Package Machinery Company 144
American Can Co	28 29	Pak-Rapid Inc 194
American Can Co	Gaylord Container Corporation . 57	Paper Machinery & Research, Inc. 193
Plastics Department 47	Globe Heat-Seal, Inc 139	Perl Machine Mfg. Co 188
American Tape Printer Co 170	Goodrich, B. F., Chemical Com- pany, The Geon Division 7	Peters Machinery Co
American Viscose Corporation, Sylvania Division 173	Goodyear Tire & Rubber Com-	Peters Machinery Co
Anderson Bros. Mfg. Co 193	pany, The Pliofilm Dept. 108, 109	Popper & Sons, Inc 177
Angier Corp 195	Gummed Products Company, The 67	Potdevin Machine Co 200
Arkell and Smiths 207		Pyroxylin Products Inc 142
Armstrong Cork Co., Glass and Closure Division 173	Haggerty Bros. & Co 187	
Closure Division 173	Hayssen Mfg. Company 116	R. C. Can Company 205
	Hazel-Atlas Glass Company 69	Rapid Cutting Co., Inc
Bagley & Sewall Company, The . 158	Hazel-Atlas Glass Company 69 Heekin Can Co., The 22 Heinrich, H. H., Company 197	Thurston Division 202
Bartelt Engineering Company 177 Beck, Charles, Machine Corpora-	Hinde & Dauch	Resina Automatic Machinery Co.,
tion 19	Howard Flashes 188	Inc
Bemis Bro. Bag Company 135	Hudson-Sharp Machine Co 180	Rexford Paper Company 192
Bensing Bros. and Deeney Sales		Reynolds Metals Company 12, 13 Rhinelander Paper Company 209
Bernadin Bottle Cap Company,	International Staple & Machine	Riegel Paper Corporation 24
Inc	Co	Robertshaw-Fulton Controls Com-
Betner, Benj. C., Co 18	interstate Chemical Products Co. 167	pany 190
Black-Clawson Co., The, Dilts Ma-	Jones, R. A., & Company, Inc 3	Roda Brothers Limited 166 Roto Bag Machine Corp 179
chine Works Division 178	Jones, R. A., & Company, Inc 3	Roto Bag Machine Corp 179 Rowell, E. N., Co. Inc 42
Braun, W., Co	Kaiser Aluminum & Chemical	Rubber Latex Co. of America 200
Burt, F. N., Company Inc 115	Sales, Inc	
many and the same	Kimberly-Clark Corporation 143	Scandia Manufacturing Company 187
C Dt- 9-1-1-1-C 167	King, Charles E., & Co 188	Schaefer Machine Co 164
Cameo Die & Label Company 167 Cargo Packers Incorporated 192	I I D I D TI GO GI	Schulman, A., Inc
Celanese Corporation of America,	Lord Baltimore Press, The 20, 21 Lowe Paper Company 68	Scientific Filter Company 140 Seal-Spout Corp 198
Plastics Division 66	Lusteroid Container Company, 68	Sefton Fibre Can Company 70
Celluplastic Corporation 199	Inc 155	Shellmar Products Corporation .
Central States Paper & Bag Co. 9		Back Cover
Champion Paper And Fibre Company, The	MRM Company, Inc 206	Southern California Plastic Com-
Champlain Company, Inc 208	Machinery Mfg. Co. Inc 139	Standard Printing Company 14
Chaspee Manufacturing Com-	Mack Molding Company, Inc 200 Manhasset Machine Co 211	Star Band Company, Inc 206
pany, The 201	Manufacturers' Literature 181, 182	Steigerwald, A. M., Company 56
Chester Packaging Products Corp. 171	Markem Machine Company 189	Stocker Manufacturing Company 62
Chisholm-Ryder Company of Pa. 178 Claremont Waste Mfg. Company 206	Maryland Glass Corporation 25	Stokes & Smith Co
Classified 210	McLaurin-Jones Co 204	Sun Tube Corporation 48
Cleveland Container Co., The 31	Mead Board Sales, Inc 16 Mercury Heat Sealing Equipment	Switzer Brothers, Inc 72
Consolidated Fackaging Machin-	Co	Sylvania Division, American Vis-
Continental Can Company 54, 55	Michigan Carton Co	cose Corporation 63
Creators Art Service 213	Miller, Walter P., Company, Inc. 33	Technopol Laboratories Limited 34
Cromwell Paper Company 6	Mills, Elmer E., Corporation 17	Technopol Laboratories Limited 34 Thurston, W. Harris, Division,
Crown Can Company 43	Milprint Inc	Reeves Brothers Inc 202
Crown Cork & Seal Company 74 Crown Cork Specialty Corp 185	Minnesota Mining & Mfg. Co 52	Triangle Package Machinery Co. 153
Crown Cork Specialty Corp 185 Cylinders Inc	Monsanto Chemical Company,	Tri-State Plastic Molding Co., Inc. 11
Symmetry and the transfer of t	Plastics Division	Tupper Corporation 58
D E II . C	Moore & Munger	Union Bag & Paper Corporation 61
Dexter Folder Company 160 Dilts Machine Works Division.	and the conference of the conf	U. S. Automatic Box Machinery
The Black-Clawson Company 178 Dobeckmun Company, The 5 du Pont de Nemours, E. I., & Co.	Nashua Corporation 76	Co., Inc
Dobeckmun Company, The 5	National Starch Products, Inc	Venesta Ltd 26
du Pont de Nemours, E. I., & Co.	Inside Front Cover	Visking Corporation, The 41, 174, 175
(Inc.), Acetate	Naugatuck Chemical 65	Vlchek Tool Company, The 203
(Inc.), Cellophane 149	New Jersey Machine Corporation 134 Nichols Paper Products Company 179	W: D d C 751 77
du Pont de Nemours, E. I., & Co.	Niemand Bros. Inc 196	Warner Brothers Company, The 75 Waxed Paper Institute, Inc 44, 45
(Inc.), Polychemicals 71		Weinman Brothers, Inc 213
Dusenbery, John, Company, Inc. 193	Ohio Boxboard Co., The 73	Western Waxed Paper Division 141
	Old Dominion Box Company, Inc. 23	Wolverine Paper Converting Ma-
Eastman Kodak Company 151	Olive Can Company	chinery Corporation 186
Economic Machinery Company, Division of Geo. J. Meyer Man-	Oxford Paper Company 10	Zumbiel, C. W., Company 211
ufacturing Co 159		
Empire Box Corporation [6]	11 /	
Ever Ready Label Corporation 177	Modern	Published by Modern Packaging Corp.
Extruders Inc 139	/ Coucon	575 Madison Avenue, New York 22, N.Y.
	/ 1	A BRESKIN
Fairest, Morgan, Ltd 46	nackaging	
Ferguson, J. L., Company 130	Modern packaging	Publication
Fisher's Foils Limited 49, 50	1 0	
Foileraft Printing Corp		



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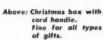
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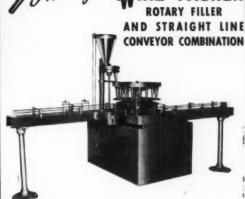
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